

List of

ABS Notations and Symbols



January 2024



LIST OF

**ABS NOTATIONS AND SYMBOLS
JANUARY 2024**

**American Bureau of Shipping
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Overview

The following listing of ABS Classification notations is comprised of the following headers:

Common Notations and Symbols

The notations and symbols contained under this heading may be applicable to any type of vessel or offshore installation, as indicated by the referenced Rules and Guides (which are mostly available for viewing at <http://www.eagle.org>).

These notations and symbols pertain to hull structure, analyses, equipment, machinery, automation, surveys, etc.

Other Notations for Specific Applications – Bulk Carrier, Container Carrier, Offshore Services, etc.

Following the common notations are groupings by type of vessel or offshore service. The notations contained under the heading for each vessel type are applicable only to that type of vessel.

The types of vessels are organized starting with those that are covered by the *Rules for Building and Classing Marine Vessels* and associated Guides specific to the vessel type and are followed by those vessels covered by the following Rules and Guides:

- *Guide for Building and Classing International Naval Ships*
- *Rules for Building and Classing High-Speed Craft*
- *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*
- *Rules for Building and Classing Yachts*
- *Rules for Building and Classing Steel Barges*
- *Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways*
- *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*
- *Offshore Service* notations, as specified within the referenced *Offshore Rules and Guides*

The assignment of a Notation designates compliance with the applicable ABS Rules or Guides. When a vessel first comes into Class, the vessel is presented to the Classification Committee for acceptance with all Notations listed. If Notations are added after the vessel has been Classed, the vessel may require presentation to the Class Committee for further acceptance. The Notations that require acceptance by the Class Committee have an entry advising that assignment requires acceptance by the Class Committee.

The example class notations given under “Remarks” on each page are intended only to show the usage of the particular notation on that page and are not necessarily all-inclusive for the particular application/services shown.

Mandatory Notations and Symbols

The mandatory requirements applicable to a specific vessel type and service must be met for a vessel to receive and maintain a class certificate.

This document also introduces optional notations. Optional notations may be added or dropped without impacting the validity of the class certificate. Requirements associated with an optional notation are to be met in order for the vessel to receive and maintain the notation.

New Notations

The following Table lists newly-added Class Notations, the category under which they fall in the list, and the date they become effective:

<i>Notation</i>	<i>Category</i>	<i>Effective Date</i>	
PMP-CBM, SMART (SHM)	Common Notations and Symbols	1 December 2023	
PMP, SMART (MHM)	Common Notations and Symbols		
PMP-CBM, SMART (MHM)	Common Notations and Symbols		
PMP+, SMART (MHM)	Common Notations and Symbols		
PMP-CBM+, SMART (MHM)	Common Notations and Symbols		
Biofuel-1	Common Notations and Symbols	1 January 2024	
Biofuel-2	Common Notations and Symbols		
CPS-B	Common Notations and Symbols		
CPS-D	Common Notations and Symbols		
CPS-V	Common Notations and Symbols		
EGC-EGR (M)	Common Notations and Symbols		
FTS(v, ρ, T)	Common Notations and Symbols		
Ice Class ID	Common Notations and Symbols		
Ice Class IE	Common Notations and Symbols		
Icebreaker*	Common Notations and Symbols		
LSC	Common Notations and Symbols		
LSC(DC)	Common Notations and Symbols		
LVSC	Common Notations and Symbols		
LVSC-Ready	Common Notations and Symbols		
POLAR(Category, PST)	Common Notations and Symbols		
POLAR Ready(Category, PST)	Common Notations and Symbols		
Anchor Handling Vessel	Anchor Handling Vessels		
CLP-V(PARR)	Container Carriers		
Crane Vessel	Crane Vessels		
General Dry Cargo Vessel	General Dry Cargo Vessels		
Liquefied Carbon Dioxide Carrier	Liquefied Gas Carriers		
SRtP	Passenger Vessels		
Offshore Support Vessel (Supply-CHEM)	Offshore Support Vessels		
Lock-out Submersible G	Underwater Vehicles and Systems		
CR	Common Notations and Symbols		1 July 2024

Retired Notations

The following Table lists Class Notations which have been retired, the category under which they fall in the list, and the date they were retired:

<i>Notation</i>	<i>Category</i>	<i>Date Retired</i>
Ice Class A0	Common Notations and Symbols	1 January 2024
Ice Class B0	Common Notations and Symbols	
Ice Class C0	Common Notations and Symbols	
Ice Class D0	Common Notations and Symbols	
Ice Class E0	Common Notations and Symbols	
Ice Class PC1, Enhanced	Common Notations and Symbols	
Ice Class PC2, Enhanced	Common Notations and Symbols	
Ice Class PC3, Enhanced	Common Notations and Symbols	
Ice Class PC4, Enhanced	Common Notations and Symbols	
Ice Class PC5, Enhanced	Common Notations and Symbols	
Ice Class PC6, Enhanced	Common Notations and Symbols	
Ice Class PC7, Enhanced	Common Notations and Symbols	
⊠ APLUS	Refrigerated Cargo Carriers	
⊠ ASLS	Refrigerated Cargo Carriers	
⊠ SASLS	Refrigerated Cargo Carriers	
LASH Barge	Barges – Ocean Services	

Common Notations and Symbols

SYMBOL

☒ Maltese Cross

DESCRIPTION

The Maltese Cross, ☒, symbol is assigned to vessels and offshore units for which the hull construction and/or the manufacture of its machinery and components and any associated required testing, as applicable, is carried out under ABS survey. For a vessel or offshore unit constructed under survey of another recognized Classification Society or Authority, the Maltese Cross, ☒, symbol will be omitted from the hull and/or machinery classification notations.

REFERENCES

1A-1-3/1 and 1A-1-3/9 of the *Rules for Conditions of Classification (Part 1A)*

1B-1-3/1 and 1B-1-3/3 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

1C-1-3/1 and 1C-1-3/5 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Classification symbol whose meaning is the same within all ABS Rules and Guides.

Assignment of this symbol requires Class Committee approval.

This notation is mandatory for vessels constructed under ABS Survey

Example:

	<i>Vessels have been built under ABS survey</i>	<i>Vessels have not been built under ABS survey</i>
Hull and Equipment:	☒ A1	A1
Machinery, boiler and systems	☒ AMS	AMS
Shipboard automation systems	☒ ACCU	ACCU

Common Notations and Symbols

SYMBOLS

☒ A1

DESCRIPTION

A1 is a classification symbol that, together with the Maltese Cross ☒ symbol, indicates compliance with the Hull requirements of the ABS Rules or their equivalent for unrestricted ocean service and survey by ABS during construction of the vessel. The symbols ☒ **A1** may be followed by appropriate vessel type notation such as **Oil Carrier, Bulk Carrier, Fuel Oil Carrier, Ore Carrier, Passenger Vessel, Vehicle Carrier, Container Carrier, Towing Vessel, Refrigerated Cargo Carrier, Liquefied Gas Carrier**, etc. The Maltese Cross ☒ symbol will be omitted for vessels that have not been built under survey by ABS.

REFERENCES

1A-1-3/1 and 1A-1-3/9 of the *Rules for Conditions of Classification (Part 1A)*

1B-1-3/1 and 1B-1-3/3 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

1C-1-3/1 and 1C-1-3/5 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Classification symbols whose meaning is the same within all ABS Rules and Guides as regards to indicating compliance with hull/structural related requirements.

Assignment of this symbol requires Class Committee approval.

This notation is mandatory for classed vessels

Common Notations and Symbols

SYMBOL



DESCRIPTION

Circle E, **E**, is a classification symbol that signifies that the equipment of anchors and chain cables of the vessel is in compliance with the requirements of the Rules, or with the requirements corresponding to the service limitations noted in the vessel's classification which have been specifically approved for the particular service. Compliance with **E** requirements is a condition of classification for vessels, for which the equipment number (EN) calculated in accordance with 3-5-1/3.1 of the *ABS Rules for Building and Classing Marine Vessels* is equal to or greater than 205.

This symbol is optional for:

- Vessels under 90 m (295 ft) having EN less than 205 or vessels intended for towing as indicated in 3-5-1/3.7 and Section 3-5-3. of the *ABS Rules for Building and Classing Marine Vessels*
- Coastal HSC or Riverine HSC with an EN less than 205 as calculated in accordance with 3-5-1/3 of the *ABS Rules for Building and Classing High-Speed Craft*
- Wind farm support vessels with notation **Wind-SC(A)** as indicated in Subsection 4/1 of the *ABS Requirements for Building and Classing Wind Farm Support Vessels*.

For self-propelled mobile offshore units, symbol **E** is mandatory and all anchoring (temporary mooring) equipment is to be fabricated and tested in presence of and to the satisfaction of the attending Surveyor, and certified in accordance with 6-1-10/Table 1 of the *ABS Rules for Building and Classing Mobile Offshore Units*.

For non-propelled mobile offshore units fitted with an anchoring (temporary mooring) equipment, if the optional symbol **E** is requested, equipment is to be fabricated and tested in presence of and to the satisfaction of the attending Surveyor and certified in accordance with 6-1-10/Table 1 of the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

1A-1-3/11 of the *Rules for Conditions of Classification (Part 1A)*

1B-2-2/9.1 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

1C-1-3/9 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Classification symbol which is applicable for temporary mooring of vessels within a harbor or other area of sheltered water

Assignment of this symbol requires Class Committee approval.

This notation is mandatory for vessels with calculated equipment number greater than 205 and self-propelled mobile offshore units. Refer to vessel specific requirements.

Example – **A1**, Oil Carrier, **E**...

Common Notations and Symbols

NOTATION

⊠ A1 (*geographical limitations*)

DESCRIPTION

The symbols ⊠ A1 followed by a notation of the service limitations is to be assigned to vessels, which have been built to the satisfaction of ABS Surveyors to specific requirements for restricted service, which have been approved by the ABS Classification Committee for the particular service. (e.g., **Gulf of Mexico**.)

REFERENCES

1A-1-3/7 of the *Rules for Conditions of Classification (Part 1A)*

1B-2-2/7 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

1C-2-2/7.1 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of this notation requires Class Committee approval unless it is being downgraded from unrestricted service.

This notation is mandatory for vessels which are not designed to meet the full criteria for unrestricted service.

Example – ⊠ A1, Ferry, **Inter-Island Service**, ⊕...

Common Notations and Symbols

NOTATION

⊠ AMS

DESCRIPTION

AMS is a classification notation that, together with the Maltese Cross ⊠ symbol, indicates that a vessel's machinery, boilers and systems have been constructed and installed under ABS survey in accordance with the requirements of the ABS Rules. The ⊠ **AMS** notation is intended for all new construction of ABS classed self-propelled vessels and offshore units.

REFERENCES

1A-1-3/13 of the *Rules for Conditions of Classification (Part 1A)*

1B-2-2/13 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

1C-1-3/11 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Classification notation whose meaning is the same within all ABS Rules and Guides as regards to indicating compliance with machinery related requirements on self-propelled vessels and offshore units.

Assignment of this notation requires Class Committee approval.

This notation is mandatory for self-propelled vessels and mobile offshore units.

Example – ⊠ A1, Oil Carrier, ⊕, ⊠ **AMS**...

Common Notations and Symbols

NOTATION

AMS

DESCRIPTION

The **AMS** notation, without the Maltese Cross ☒ symbol, is assigned to self-propelled vessels and offshore units for which the machinery, boilers and systems have not been constructed and installed under ABS survey, but are found satisfactory with regard to ABS requirements.

REFERENCES

1A-1-3/15 of the *Rules for Conditions of Classification (Part 1A)*

1C-1-3/13 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Classification notation whose meaning is the same within all ABS Rules and Guides as regards to indicating compliance with machinery related requirements on self-propelled vessels and offshore units.

Assignment of this notation requires Class Committee approval.

This notation is mandatory for self-propelled vessels and mobile offshore units that are not eligible for ☒ **AMS**.

Example – A1, Oil Carrier, ⊕, **AMS**...

Common Notations and Symbols

NOTATION

⊠ ACC

DESCRIPTION

Automatic Centralized Control (**ACC**) – This notation is assigned to a vessel having the means to control and monitor the propulsion-machinery space from a continuously manned centralized control and monitoring station installed within or adjacent to, the propulsion machinery space. The Maltese Cross ⊠ symbol signifies that the pertinent automatic or remote control and monitoring systems have been assembled, tested and installed under ABS survey.

REFERENCES

4-1-1/1.5, 4-9-5/1, and 4-9-11/1 of the *Rules for Building and Classing Marine Vessels*

4-1-1/1.5 and 4-9-5/1 of the *Guide for Building and Classing International Naval Ships*

REMARKS

See also ⊠ ACCU

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, Oil Carrier, ⊕, ⊠ AMS, ⊠ ACC...

Common Notations and Symbols

NOTATION

⊠ ACCU

DESCRIPTION

Automatic Centralized Control Unmanned (ACCU) – This notation is assigned to a vessel having the means to control and monitor the propulsion-machinery space from the navigation bridge and from a centralized control and monitoring station installed within or adjacent to, the propulsion machinery space. The Maltese Cross ⊠ symbol signifies that the pertinent automatic or remote control and monitoring systems have been assembled, tested and installed under ABS survey.

REFERENCES

4-1-1/1.5, 4-9-6/1, and 4-9-11/1 of the *Rules for Building and Classing Marine Vessels*

4-1-1/1.5 and 4-9-6/1 of the *Guide for Building and Classing International Naval Ships*

4-1-1/1.5 and 4-9-1/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

4-7-1/3 of the *Rules for Building and Classing High-Speed Craft*

Great Lakes Bulk Carriers, Aluminum Vessels, Reinforced Plastic Vessels and Yachts will also be eligible for this notation provided the systems and the equipment are in full compliance with the applicable requirements of 4-9-6/1 of the *ABS Rules for Building and Classing Marine Vessels*.

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, Oil Carrier, ⊕, ⊠ AMS, ⊠ ACCU...

Common Notations and Symbols

NOTATION

⊠ ABCU

DESCRIPTION

Automatic Bridge Centralized Control Unmanned (ABCU) – This notation is assigned to a self-propelled vessel which is fitted with the required automation and remote monitoring and control systems to enable the propulsion machinery space to be periodically unattended (similar to an **ACCU** classed vessel) and the propulsion control to be effected primarily from the navigation bridge. The Maltese Cross ⊠ symbol signifies that the pertinent automatic or remote control and monitoring systems have been assembled, tested and installed under ABS survey.

REFERENCES

4-1-1/1.5, 4-9-7/1.1, and 4-9-11/1 of the *Rules for Building and Classing Marine Vessels*

4-1-1/1.5 and 4-9-1/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

4-7-1/3 of the *Rules for Building and Classing High-Speed Craft*

Aluminum Vessels, Reinforced Plastic Vessels and Yachts will also be eligible for this notation provided the systems and the equipment are in full compliance with the applicable requirements of 4-9-7/1.1 of the *Rules for Building and Classing Marine Vessels*.

REMARKS

This notation is available for unrestricted service of small vessels, capable of operating as **ACCU** classed vessels but because of their compact propulsion-machinery space design are not fitted with the means to control the propulsion and its associated machinery from a centralized location within the propulsion-machinery space.

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, Offshore Support Vessel, ⊕, ⊠ AMS, ⊠ ABCU...

Common Notations and Symbols

NOTATION

AIRN

AIRN+

AIRN-M (a, b)

DESCRIPTION

AIRN – This notation is assigned to vessels that have met the external airborne noise criteria specified in Section 6 and Section 7 of the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise* as confirmed by measurement.

AIRN+ – This notation is assigned to vessels that have met the more stringent external airborne noise criteria specified in Section 6 and Section 7 of the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise* as confirmed by measurement.

AIRN-M (a, b) – This notation is assigned to vessels that have external airborne noise measured in accordance with the measurement procedure as specified in Section 7 of the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise*. **a** denotes the averaged A-weighted external airborne noise level (31.5 to 8000 Hz) of the vessel under normal berth condition, in dB(A). **b** denotes the averaged A-weighted external airborne noise level of the vessel in low frequency range (31.5 to 160 Hz) under normal berth condition, in dB(A).

REFERENCES

Subsection 1/3 of the *Guide for the Classification Notation Underwater Noise and External Airborne Noise*

REMARKS

These notations are optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **AIRN**...

✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **AIRN+**...

✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **AIRN-M (45, 40)**...

Common Notations and Symbols

NOTATION

Alternative Fuel Ready

CNG Fuel Ready

LNG Fuel Ready

Ethane Fuel Ready

LPG Fuel Ready

DME Fuel Ready

Methanol Fuel Ready

Ethanol Fuel Ready

Hydrogen Fuel Ready

Ammonia Fuel Ready

DESCRIPTION

These notations are assigned to vessels complying with the “Alternative Fuel Ready” scheme in the *ABS Guide for Gas and Other Low-Flashpoint Fuel Ready Vessels*, which incorporates both the Class Approval of the detailed drawings and the installation of parts of the system and specified equipment on board the vessel including Survey in accordance with the related requirements of Part 5C, Chapter 13 of the *ABS Rules for Building and Classing Marine Vessels*.

Upon satisfactory completion of each review level, ABS will provide the following recognition of the extent to which compliance with Part 5C, Chapter 13 of the *Marine Vessel Rules* has been established:

- **Level 1C** – A design-based Class Notation assigned upon satisfactory review of the concept design for Level 1 compliance in accordance with Subsection 2/1 of the Guide. This notation indicates the actual fuels(s) covered by the concept design and the basic ability of a vessel design to fit a particular gas or other low flashpoint fuel. Upon request, an Approval in Principle (AIP) may also be issued for such a design based concept. The “Alternative Fuel Ready Level 1C” notations associated with the fuels detailed in Subsection 1/1 of the Guide are to be assigned when those fuels are covered in the concept design review.
- **Level 2D** – A design-based Class Notation assigned upon satisfactory review of the detail design for Level 2 compliance in accordance with Subsection 2/3 of the Guide. This notation indicates the actual fuels(s) covered by the detail design review and the components or systems for which the design was reviewed. The “Alternative Fuel Ready Level 2D” notations associated with the fuels detailed in Subsection 1/1 of the Guide are to be assigned when those fuels are covered in the detail design review.
- **Level 3** – A Class Notation indicating the actual fuels(s) covered by the plan approval and with descriptive letters introduced in the *Record* listing the parts of the system that have been installed in accordance with approved plans and to the satisfaction of the Surveyor prior to delivery of the vessel.

The following descriptive letters will supplement the **Fuel Ready** class notation when the component or system indicated has been ABS approved/surveyed as per the applicable Rule/Guide requirements and installed on board to the attending Surveyor’s satisfaction:

<i>System/Component</i>	<i>Descriptive Letter(s)</i>
Hull structural reinforcement for fuel storage tank	S
Fuel storage tank arrangements	TA
Fuel bunkering system and arrangement	BK
Fuel supply system	FS
Main engines	ME
Auxiliary engines	AE
Gas turbines	GT
Main or Auxiliary boilers	MB, AB
Fuel cells	FC

REFERENCES

Subsection 1/5, 2/1.1, 2/3.1, and 2/5.1 of the *Guide for Gas and Other Low-Flashpoint Fuel Ready Vessels*

REMARKS

These notations are optional.

- Example – ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **LPG Fuel Ready Level 1C**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **Methanol Fuel Ready Level 1C**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **LPG and Ammonia Fuel Ready Level 1C**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **LNG Fuel Ready Level 2D (S, FS, ME, AE)**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **LPG Fuel Ready Level 2D (S, FS, ME)**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **Ammonia Fuel Ready Level 2D (S, ME)**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **LNG Fuel Ready Level 3 (S, FS, ME, AE)**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **LPG Fuel Ready Level 3 (S, FS, ME)**, NBL, SH, SHCM...
- ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **Ammonia Fuel Ready Level 3 (S, ME)**, NBL, SH, SHCM...

Common Notations and Symbols

NOTATION

Annual Survey

DESCRIPTION

This notation is assigned to vessels for which all of the requirements of Special Periodical Survey – Hull, except for tank testing, are required each year for the first four years of each five-year cycle. At the fifth year, a complete Special Periodical Survey – Hull, including tank testing is required.

REFERENCES

7-2-1/1 of the *Rules for Survey After Construction (Part 7)*

REMARKS

Assignment of this notation requires Class Committee approval.

Example – ✘ A1, HSC Crewboat, ⊕, ✘ AMS, **Annual Survey**...

Common Notations and Symbols

NOTATION

⊠ APS

DESCRIPTION

This notation is assigned to a self-propelled vessel fitted with athwartship thrusters intended to assist in the maneuvering of the vessel. The Maltese Cross ⊠ symbol signifies that compliance with these Rules was verified by ABS during construction of the vessel. This includes survey of the machinery at the manufacturer's plant (where required), during installation on board the vessel, and during trials.

REFERENCES

4-1-1/1.5 and 4-3-5/1.3.1 of the *Rules for Building and Classing Marine Vessels*

4-1-1/1.5 and 4-3-5/1.3.1 of the *Guide for Building and Classing International Naval Ships*

Mobile Offshore Units, Steel Vessels for Service on Rivers and Intracoastal Waterways, Aluminum Vessels, Reinforced Plastic Vessels, Light Warships, Patrol and High-Speed Naval Vessels, High-Speed Craft, and Yachts will also be eligible for this notation provided the systems and the equipment are in full compliance with the applicable requirements 4-3-5/1.3.1 of the *ABS Rules for Building and Classing Marine Vessels*.

REMARKS

This notation is optional.

Example – ⊠ A1, Container Carrier, (E), ⊠ AMS, ⊠ ACCU, ⊠ **APS**, SH, SHCM...

Common Notations and Symbols

NOTATION

AT(*hull girder component + additional thickness*)

DESCRIPTION

Additional Thickness (**AT**) – This notation is assigned to all conventional type vessels and to floating production installations where the vessel or installation incorporates additional plate thickness above the required scantlings. The notation will be followed by the description of the major hull girder component(s) that has the additional thickness. It will also include a number to indicate the magnitude of the additional thickness (rounded to the nearest 0.5 mm) that has been applied, i.e., **AT(DK+0.5)**.

The major structural components are defined as follows:

DK	Upper deck (including stringer plate)
BS	Bottom shell (including bilge)
IB	Inner-bottom
SS	Side shell (including shear strake)
IS	Inner skin (including “hopper” sloping plating)
LB	Longitudinal bulkheads other than the inner skin
TB	Transverse Bulkhead

REFERENCES

1-1-2/5.13 of the *Rules for Building and Classing Floating Production Installations*

2-1/3.15 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

Steel Vessels will also be eligible for this notation for vessels incorporating additional plate thicknesses above the required scantlings.

REMARKS

This notation is optional.

Example – ✕ A1, Floating Offshore Installation, ✕ AMS, **AT(BS+0.5)**...

Common Notations and Symbols

NOTATION

AUTONOMOUS (*function category, operations supervision level*)

REMOTE-CON (*function category*)

DESCRIPTION

AUTONOMOUS (*function category, operations supervision level*) – This notation is assigned to a vessel or unit possessing a permanently installed autonomous function that satisfies the requirements in the ABS *Requirements for Autonomous and Remote Control Functions*. The function(s) is to be indicated in the vessel records along with its consequences of failure category.

REMOTE-CON (*function category*) – This notation is assigned to a vessel possessing a permanently installed remote control function that satisfies the requirements in the requirements in Section 6 of the ABS *Requirements for Autonomous and Remote Control Functions*. The function(s) is to be indicated in the vessel records along with its consequences of failure category.

The Function Category to be indicated in the notations is to be selected from the following:

- i)* Navigation (NAV)
- ii)* Maneuvering (MNV)
- iii)* Mooring/Unmooring (MOR)
- iv)* Docking/Undocking (DOC)
- v)* Propulsion (PRP)
- vi)* Auxiliary (AUX)
- vii)* Environmental Protection (ENV)
- viii)* Cargo Handling (CGH)
- ix)* Ballast and Trim (BAL)
- x)* Industrial Processes (IND)

The operations supervision levels are as follows:

<i>Operator Location</i>	<i>Required Attention Level</i>	<i>Operations Supervision Level</i>
Onboard vessel	Continuous supervision	OP1
Onboard vessel	Periodic supervision	OP2
Onboard vessel	As needed basis (System notification or operational mode)	OP3
Remote location	Continuous supervision	RO1
Remote location	Periodic supervision	RO2
Remote location	As needed basis (System notification or operational mode)	RO3

REFERENCES

Subsections 1/7, 1/8 and 1/9 of the *Requirements for Autonomous and Remote Control Functions*

REMARKS

Assignment of this notation requires Class Committee approval.

These notations are mandatory for vessels or units with permanently installed autonomous or remote-controlled functions. The Guide is not applicable to underwater vehicle systems and hyperbaric facilities.

- Example –
- ✘ A1, Container Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **AUTONOMOUS (NAV, OP2, RO2)**, SH, SHCM...
 - ✘ A1, Container Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **REMOTE-CON (NAV)**, SH, SHCM...
 - ✘ A1, Offshore Wind Turbine (Floating), **REMOTE-CON (BAL, RO2)**...

Common Notations and Symbols

NOTATION

Biofuel-1

Biofuel-2

DESCRIPTION

These notations are assigned to vessels utilizing biofuel or biofuel blends as fuel in the combustion units for propulsion and auxiliary systems on board.

Biofuel-1 – This notation may be assigned to vessels which use a biofuel blend of up to and including 30% biofuel in compliance with IMO requirements and with 6-5-1/5.i. of the *ABS Rules for Building and Classing Marine Vessels*.

Biofuel-2 – This notation may be assigned to vessels which use a biofuel blend of greater than 30% biofuel in compliance with IMO requirements and with 6-5-1/5.i and 6-5-1/5.ii through 6-5-1/5.iv of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-5-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

These notations are optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **Biofuel-1**, CSR, AB-CM...

☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **Biofuel-2**...

Common Notations and Symbols

NOTATION

BWE

DESCRIPTION

Ballast Water Exchange (BWE) – This notation is assigned to vessels designed, constructed, and surveyed in accordance with the *ABS Guide for Ballast Water Exchange*.

Vessels which have not been constructed under survey in accordance with the requirements of this Guide may obtain the optional **BWE** notation, provided the vessel's arrangements have been determined to comply with the design and construction criteria contained in this Guide. The operation of the ballast water exchange system is to be demonstrated to ABS, or documentation confirming the successful performance of ballast water exchange for a period of one year is to be submitted to ABS.

This notation is applicable to vessels of any type operating in the aquatic environment and includes submersibles, floating craft, floating platforms, Floating Storage Units (FSUs), and Floating Production Storage and Offloading Units (FPSOs).

REFERENCES

1-4/1 of the *Guide for Ballast Water Exchange*

REMARKS

This notation is optional.

Example – ✕ A1, Oil Carrier, (E), ✕ AMS, ✕ ACCU, CSR, AB-CM, **BWE**...
A1, Oil Carrier, (E), AMS, **BWE**...

Common Notations and Symbols

NOTATION

BWT

BWT+

DESCRIPTION

BWT – This notation is assigned to a vessel with a ballast water management system installed onboard that has received a Type Approval Certificate issued by an IMO Member State. The system has been reviewed and installed in compliance with the *ABS Guide for Ballast Water Treatment* and serves to identify a level of compliance with the applicable regulations contained in the IMO “*International Convention for the Control and Management of Ships’ Ballast Water and Sediments, 2004*”, as well as those supporting IMO Guidelines referenced in the Convention addressing the ballast water management systems.

BWT+ – This notation will be assigned to a vessel with a ballast water management system installed onboard that, in addition to being type approved by an IMO Member State and evaluated for compliance with the requirements in the *ABS Guide for Ballast Water Treatment*, has been fabricated under survey at the manufacturing facility by an ABS Surveyor.

REFERENCES

Subsection 1/7 of the *Guide for Ballast Water Treatment*

REMARKS

These notations are optional.

Example – ☒ A1, Oil Carrier, (E), ☒ AMS, ☒ ACCU, CSR, AB-CM, **BWT**...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **BWT+**...

Common Notations and Symbols

NOTATION

CCO(T_{DST} , T_{MAT})

CCO(T_{DST} , T_{MAT})⁺

CCO-POLAR(T_{DST} , T_{MAT})

CCO-POLAR(T_{DST} , T_{MAT})⁺

(HR HOURS)

DE-ICE

DESCRIPTION

These notations are assigned to vessels complying with the requirements specified in the ABS *Guide for Vessels Operating in Low Temperature Environments*. The “ T_{DST} , T_{MAT} ” in the parentheses refer to the design service temperature and the minimum anticipated temperature in °C for which the vessel’s structure and exposed machinery are designed, respectively. Vessels receiving either the **CCO** or the **CCO-POLAR** notation will also be required to obtain the Class notation **POT**.

CCO(T_{DST} , T_{MAT}) – This notation is a basic notation for vessels operating in a low temperature environment and is applicable to vessels designed, constructed, and surveyed in accordance with the ABS *Guide for Vessels Operating in Low Temperature Environments*.

CCO-POLAR(T_{DST} , T_{MAT}) – This notation is available for those vessels intended to operate in Polar Regions on a continuous basis.

(HR HOURS) – This notation can be appended to the **CCO-POLAR(T_{DST} , T_{MAT})** notation to indicate that a vessel is equipped and provided with arrangements for emergency power in excess of the minimum 18 hours specified within Regulation II-1/43 of the 1974 Safety of Life at Sea Convention (SOLAS) and 4-8-2/5.5 of the ABS *Rules for Building and Classing Marine Vessels*. This notation would be expressed with the designation **HR** in parentheses with the total number of hours.

+ – Vessels may have the **+** appended to the notation to indicate the placement of additional equipment onboard for the crew and specific low temperature environment training for the crew as per Sections 8 and 9 of the ABS *Guide for Vessels Operating in Low Temperature Environments*.

DE-ICE is a notation available for vessels occasionally operating in low temperatures subject to ice accretion. The requirements in Section 10 of the ABS *Guide for Vessels Operating in Low Temperature Environments* are applicable to vessels seeking this optional notation.

These notations supersede the **CCO-HR(TEMP)** and **CCO-HR(TEMP)⁺** notations for vessels contracted for construction after 1 August 2010.

REFERENCES

Subsection 1/3 of the *Guide for Vessels Operating in Low Temperature Environments*

REMARKS

See Part 6, Chapter 1 of the *ABS Rules for Building and Classing Marine Vessels* for the notations for ice strengthening and their requirements.

These notations are optional.

- Example –
- ✘ A1, Oil Carrier, Ice Class A0, Ⓢ, ✘ AMS, ✘ ACCU, **CCO(-18, -30)**...
 - ✘ A1, Oil Carrier, Ice Class A0, Ⓢ, ✘ AMS, ✘ ACCU, **CCO(-18, -30)+**...
 - ✘ A1, Oil Carrier, Ice Class PC1, Ⓢ, ✘ AMS, ✘ ACCU, **CCO-POLAR(-30, -50)**...
 - ✘ A1, Oil Carrier, Ice Class PC1, Ⓢ, ✘ AMS, ✘ ACCU, **CCO-POLAR(-30, -50)+**...
 - ✘ A1, Oil Carrier, Ice Class PC1, Ⓢ, ✘ AMS, ✘ ACCU, **CCO-POLAR(-30, -50) (HR24)**...
 - ✘ A1, Oil Carrier, Ice Class PC1, Ⓢ, ✘ AMS, ✘ ACCU, **CCO-POLAR(-30, -50) (HR24)+**...
 - ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **DE-ICE**...

Common Notations and Symbols

NOTATION

CGSU

DESCRIPTION

Cargo Gear Self Unloading (**CGSU**) – This notation signifies that an ABS Register of Cargo Gear for Great Lakes Vessels is issued under the provisions of the ABS *Guide for Certification of Lifting Appliances*.

REFERENCES

1-1/9.3 of the *Guide for Certification of Lifting Appliances*

REMARKS

This notation is optional.

Example – ✘ A1, Bulk Carrier Great Lakes Service, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓔ, ✘ AMS, ✘ ACCU, SH, SHCM, **CGSU**...

Common Notations and Symbols

NOTATION

CPS-B

CPS-D

CPS-V

CPS-COT

CorrResistant

DESCRIPTION

Coating Performance Standard (**CPS-B**) – indicates compliance for all dedicated seawater ballast tanks of all types of SOLAS compliant vessels with IMO Resolution MSC.215(82) Performance Standard for Protective Coatings, required by SOLAS Chapter II-1/3-2, amended by IMO Resolution MSC.216(82), in accordance with Section 2 of the *ABS Guide for Performance Standards for Corrosion Protection*.

Coating Performance Standard (**CPS-D**) – indicates compliance for double-side skin spaces of SOLAS compliant Bulk Carriers with IMO Resolution MSC.215(82) Performance Standard for Protective Coatings, required by SOLAS Chapter II-1/3-2, amended by IMO Resolution MSC.216(82), in accordance with Section 2 of the *ABS Guide for Performance Standards for Corrosion Protection*.

Coating Performance Standard (**CPS-V**) – indicates compliance for void spaces of Bulk Carriers and Crude Oil Tankers with IMO Resolution MSC.244(83) for Performance Standard for Protective Coatings for Void Spaces on Bulk Carriers and Oil Tankers, in accordance with Section 2 of the *ABS Guide for Performance Standards for Corrosion Protection*.

Coating Performance Standard – Crude Oil Tanker (**CPS-COT**) – indicates compliance for cargo oil tanks of SOLAS compliant Crude Oil Tankers with IMO Resolution MSC.288(87) Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers (IMO PSPC-COT), required by SOLAS Chapter II-1/3-11, amended by IMO Resolution MSC.291(87), in accordance with Section 3 of the *ABS Guide for Performance Standards for Corrosion Protection*.

Corrosion Resistant Steel (CorrResistant) – indicates compliance for cargo oil tanks of SOLAS compliant Crude Oil Tankers with IMO Resolution MSC.289(87) Performance Standard for Alternative Means of Corrosion Protection for Cargo Oil Tanks of Oil Tankers – Performance Standard for Corrosion Resistant Steel (IMO PSCRS-COT), required by SOLAS Chapter II-1/3-11, amended by IMO Resolution MSC.291(87), in accordance with Section 4 of the *ABS Guide for Performance Standards for Corrosion Protection*.

These notations are intended for all SOLAS compliant vessels but may also be issued to other types of vessels such as non-SOLAS vessels, MODU Code compliant vessels, and ship-type floating production installations.

See Section 1 Table 1 of the *ABS Guide for Performance Standards for Corrosion Protection* for more information.

REFERENCES

Subsection 1/1 and Section 1, Table 1 of the *Guide for Performance Standards for Corrosion Protection*

REMARKS

These notations are mandatory, except for **CPS-V**. However, SOLAS requires protective coating for most vessels.

- Example –
- ☒ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CPS-B**...
 - ☒ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CPS-D**...
 - ☒ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CPS-V**...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CPS-B**...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CPS-V**...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CPS-COT**...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CorrResistant**...

Common Notations and Symbols

NOTATION

CR

DESCRIPTION

Cyber Resilience (**CR**) – This notation is assigned to vessels meeting the cyber resilience requirements of Section 4-9-13 of the ABS *Rules for Building and Classing Marine Vessels*.

REFERENCES

4-9-13/1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory for all passenger vessels and other vessels of 500 GT and over.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **CR**...

Common Notations and Symbols

NOTATION

CRC

SC

HC

OC

SP

MRW

RMP

PL

PL+

PL++

Subsea

DESCRIPTION

Crane Register Certificate (**CRC**) – This notation signifies that an ABS Register of Lifting Appliances is issued under the provisions of the *ABS Guide for Certification of Lifting Appliances*. The following notations (effective 1 July 2016) indicate the type of crane or lifting appliance installed on board the vessel that is designed, constructed and tested in accordance with the respective requirements of the *ABS Guide for Certification of Lifting Appliances*:

SC Shipboard crane

OC Offshore crane

HC Heavy Lift crane

SP Special Purpose crane (i.e., a davit, monorail hoist/ engine room overhead crane, provision crane, or union purchase)

MRW Base-mounted Man Riding Winch

RMP Stern, bow and sideport ramps and moveable platforms (decks)

For personnel lifting, the above notations may be supplemented with the **PL**, **PL+**, or **PL++** notations, as follows:

PL Crane that is intended to be used for personnel lifting and is fitted with an Emergency Recovery System in compliance with 2-9/13.3 of the *ABS Guide for Certification of Lifting Appliances*.

PL+ Crane that is intended to be used for personnel lifting and is fitted with an Emergency Recovery System in compliance with 2-9/13.5 of the *ABS Guide for Certification of Lifting Appliances*.

PL++ Crane that is intended to be used for personnel lifting and is fitted with an Emergency Recovery System in compliance with 2-9/13.7 of the *ABS Guide for Certification of Lifting Appliances*.

For subsea lifting, notations **OC** and **HC** may also be supplemented with the **Subsea** notation.

REFERENCES

1-1/9.1 of the *Guide for Certification of Lifting Appliances*

REMARKS

These notations are optional.

- Example –
- ✘ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), ⑥, ✘ AMS, ✘ ACCU, CSR, AB-CM, **CRC(SC)**...
 - ✘ A1, Offshore Support Vessel (SSR), GR A – (320), ⑥, ✘ AMS, **CRC(OC-PL+)**...
 - ✘ A1, Offshore Support Vessel (Heavy Lift), Wind-SC, ⑥, ✘ AMS, **CRC(SC-PL++, HC-PL+)**...
 - ✘ A1, Offshore Support Vessel (Heavy Lift), ⑥, ✘ AMS, **CRC(HC-Subsea)**...
 - ✘ A1, Vehicle Carrier, ⑥, ✘ AMS, **CRC(RMP)**...

Common Notations and Symbols

NOTATION

CS-1

CS-2

DESCRIPTION

These notations are assigned to ships and offshore assets that comply with the ABS requirements contained in the *ABS Guide for Cybersecurity Implementation for the Marine and Offshore Industries – ABS CyberSafety® Volume 2*. The scope of each notation is limited to Primary Essential Services and ancillary OT or IT systems or functions digitally connected to Primary Essential Services systems.

CS-1 – This notation is applicable to Company, Owner, or Vessel Manager and is applied to a specified vessel. It documents that the vessel has met requirements for a cybersecurity program per Table 3 in 2/1.3 of the Guide.

CS-2 – This notation is applicable to Company, Owner, or Vessel Manager and is applied to a specified vessel. It documents that the vessel has met requirements for a cybersecurity program per Table 3 in 2/1.3 of the Guide and the additional requirements related to Policies & Procedures, Vessel CRMS Design and Management of Change per Table 4 in 2/1.3 of the Guide.

REFERENCES

Subsection 1/3 and 2/1.3 of the *Guide for Cybersecurity Implementation for the Marine and Offshore Industries – ABS CyberSafety® Volume 2*

REMARKS

These notations are optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **CS-1**...

☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **CS-2**...

Common Notations and Symbols

NOTATION

CS-Ready

DESCRIPTION

This notation is assigned to ships and offshore assets that comply with the ABS requirements contained in the *ABS Guide for Cybersecurity Implementation for the Marine and Offshore Industries – ABS CyberSafety® Volume 2*. The scope of this notation is limited to Primary Essential Services and ancillary OT or IT systems or functions digitally connected to Primary Essential Services systems.

This notation is applicable the Ship Builder Integrator (SBI) applied to a specified vessel. It documents that cybersecurity procedures and protections are applied to critical OT/IT systems during vessel construction and are documented and communicated to the Owner per Table 2 in 2/1.2 of the Guide. This notation provides OT/IT system information that can be utilized by the Company to satisfy certain **CS-1** and **CS-2** requirements.

REFERENCES

Subsection 1/3 and 2/1.2 of the *Guide for Cybersecurity Implementation for the Marine and Offshore Industries – ABS CyberSafety® Volume 2*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **CS-Ready**...

Common Notations and Symbols

NOTATION

CS-System

DESCRIPTION

This notation is assigned to ships and offshore assets that comply with the ABS requirements contained in the *ABS Guide for Cybersecurity Implementation for the Marine and Offshore Industries – ABS CyberSafety® Volume 2*. The scope of this notation is limited to Primary Essential Services and ancillary OT or IT systems or functions digitally connected to Primary Essential Services systems.

This notation is applicable the Original Equipment Manufacturer (OEM) equipment installed on a specified vessel. It documents that at least one of the installed systems, providing a Primary Essential Service, has an active ABS CyberSafety PDA Certificate per Table 1 in 2/1.1 of the Guide. This notation provides OT/IT system information that can be utilized by the Company to satisfy certain **CS-1** and **CS-2** requirements.

REFERENCES

Subsection 1/3 and 2/1.1 of the *Guide for Cybersecurity Implementation for the Marine and Offshore Industries – ABS CyberSafety® Volume 2*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **CS-System**...

Common Notations and Symbols

NOTATION

DBC

DESCRIPTION

Designed for **Bottom Contact (DBC)** – This notation is assigned to vessels that are designed and built for their hull to rest on the seabed (or riverbed, as applicable) in a controlled environment during normal operation in accordance with the *ABS Requirements for Vessels Designed for Bottom Contact*.

Such bottom contact operations are intended to extend over short periods of time (for example, between tidal variations).

These requirements are applicable to barges and ships but do not apply to offshore units involved in hydrocarbon exploration operations.

REFERENCES

Subsection 1/2 of the *Requirements for Vessels Designed for Bottom Contact*

REMARKS

This notation is mandatory for vessels carrying out planned bottom contact operations.

Example – ☒ A1, Offshore Support Vessel (Cable Lay), ⊕, **DBC**, ☒ AMS, UWILD...

☒ A1, Barge Cable Laying, **DBC**, UWILD...

Common Notations and Symbols

NOTATION

⊠ DPS-0

DESCRIPTION

The **D**ynamic **P**ositioning **S**ystem notation **DPS-0** indicates that a self-propelled (or non-self-propelled) vessel is fitted with a system of thrusters, positioning instruments and control systems with a centralized manual position control and automatic heading control to maintain a desired position and heading at sea without external aid under specified maximum environmental conditions; and that the systems are in accordance with the applicable requirements of the *ABS Guide for Dynamic Positioning Systems*. The assigned numeral “0” indicates the degree of redundancy. The Maltese Cross ⊠ symbol signifies that compliance with these Rules was verified by ABS during construction of the vessel. This includes survey of the machinery at the manufacturer’s plant (where required), during installation on board the vessel, and during trials.

REFERENCES

Subsection 1/3 of the *ABS Guide for Dynamic Positioning Systems*

REMARKS

See also ⊠ DPS-1, ⊠ DPS-2 and ⊠ DPS-3

This notation is optional.

Example – ⊠ A1, Oil Carrier, ⊕, ⊠ AMS, ⊠ ACCU, ⊠ DPS-0...

Common Notations and Symbols

NOTATION

☒ DPS-1

☒ DPS-1+

DESCRIPTION

The **D**ynamic **P**ositioning **S**ystem notation **DPS-1** indicates that a self-propelled (or non-self-propelled) vessel is fitted with a system of thrusters, positioning instruments and control systems capable of automatically maintaining the position and heading at sea without external aid under a specified maximum environmental conditions as well as a centralized manual position control with automatic heading control; and that the systems are in accordance with the applicable requirements of the *ABS Guide for Dynamic Positioning Systems*. The assigned numeral “1” indicates the degree of redundancy. The Maltese Cross ☒ symbol signifies that compliance with these Rules was verified by ABS during construction of the vessel. This includes survey of the machinery at the manufacturer’s plant (where required), during installation on board the vessel, and during trials.

At the Owner’s request, the symbol + for the **DPS**-series notations may be assigned indicating additional requirements for station keeping capacity and failure modes for static components of the DP systems.

REFERENCES

Subsection 1/3 of the *ABS Guide for Dynamic Positioning Systems*

REMARKS

See also ☒ **DPS-0**, ☒ **DPS-2** and ☒ **DPS-3**

Assignment of this notation requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, ☒ **DPS-1**...

☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, ☒ **DPS-1+**...

Common Notations and Symbols

NOTATION

☒ DPS-2

☒ DPS-2+

DESCRIPTION

The **D**ynamic **P**ositioning **S**ystem notation **DPS-2** indicates that a self-propelled (or non-self-propelled) vessel is fitted with a system of thrusters, positioning instruments and control systems capable of automatically maintaining the position and heading at sea without external aid within a specified operating envelope under specified maximum environmental conditions during and following any single fault excluding a loss of compartment or compartments; and that the systems are in accordance with the applicable requirements of the *ABS Guide for Dynamic Positioning Systems*. The assigned numeral “**2**” indicates the degree of redundancy. The Maltese Cross ☒ symbol signifies that compliance with these Rules was verified by ABS during construction of the vessel. This includes survey of the machinery at the manufacturer’s plant (where required), during installation on board the vessel, and during trials.

At the Owner’s request, the symbol **+** for the **DPS**-series notations may be assigned indicating additional requirements for station keeping capacity and failure modes for static components of the DP systems.

REFERENCES

Subsection 1/3 of the *ABS Guide for Dynamic Positioning Systems*

REMARKS

See also ☒ **DPS-0**, ☒ **DPS-1** and ☒ **DPS-3**

Assignment of this notation requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, ☒ **DPS-2**...

☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, ☒ **DPS-2+**...

Common Notations and Symbols

NOTATION

☒ DPS-3

☒ DPS-3+

DESCRIPTION

The **D**ynamic **P**ositioning **S**ystem notation **DPS-3** indicates that a self-propelled (or non-self-propelled) vessel is fitted with a system of thrusters, positioning instruments and control systems capable of automatically maintaining the position and heading at sea without external aid within a specified operating envelope under specified maximum environmental conditions during and following any single fault including a loss of a compartment due to fire flood; and that the systems are in accordance with the applicable requirements of the *ABS Guide for Dynamic Positioning Systems*. The assigned numeral “**3**” indicates the degree of redundancy. The Maltese Cross ☒ symbol signifies that compliance with these Rules was verified by ABS during construction of the vessel. This includes survey of the machinery at the manufacturer’s plant (where required), during installation on board the vessel, and during trials.

At the Owner’s request, the symbol **+** for the **DPS**-series notations may be assigned indicating additional requirements for station keeping capacity and failure modes for static components of the DP systems.

REFERENCES

Subsection 1/3 of the *ABS Guide for Dynamic Positioning Systems*

REMARKS

See also ☒ **DPS-0**, ☒ **DPS-1** and ☒ **DPS-2**

Assignment of this notation requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Oil Carrier, ⊕, ☒ AMS, ☒ ACCU, ☒ **DPS-3**...

☒ A1, Oil Carrier, ⊕, ☒ AMS, ☒ ACCU, ☒ **DPS-3+**...

Common Notations and Symbols

NOTATION

EEDI-Ph3

DESCRIPTION

This notation is assigned to a vessel whose verified attained Energy Efficiency Design Index (EEDI) value is less than or equal to the required value for EEDI Phase 3 in MARPOL Annex VI, Regulation 21 as amended by IMO Resolution MEPC.324(75), in accordance with Section 5 of the *ABS Guide for the Environmental Protection Notations for Vessels*.

REFERENCES

1/3.9 and Section 5 of the *Guide for the Environmental Protection Notations for Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, ⊕, ✘ AMS, ✘ ACCU, **EEDI-Ph3**...

Common Notations and Symbols

NOTATION

EFP-A1

EFP-A2

EFP-M1

EFP-M2

EFP-C

DESCRIPTION

EFP-A1 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/3 and have accommodation areas designed, constructed and equipped in accordance with the requirements in 1/5.1.2 as well as the less stringent enhanced requirements of Chapter 2, Section 6 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-A2 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/3 and have accommodation areas designed, constructed and equipped in accordance with the requirements in Chapter 1 as well as Chapter 2, Sections 1 through 5 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-M1 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/5.5.2 and also comply with the less stringent enhanced requirements for the machinery spaces in Chapter 3, Section 8 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-M2 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/3 and have the machinery spaces designed, constructed and equipped in accordance with the requirements in Chapter 1 and Chapter 3, Sections 1 through 7 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-C – This notation is assigned to vessels identified in Chapter 4 that meet the criteria in 1-1/3 and have the cargo areas designed, constructed and equipped in accordance with Chapters 1 and 4 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

REFERENCES

1-1/5 of the *Guide for Enhanced Fire Protection Arrangements*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **EFP-A1**...
✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **EFP-M2**...
✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **EFP-C**...

Common Notations and Symbols

NOTATION

EGC-OCCS

DESCRIPTION

This notation is assigned to a vessel fitted with an Onboard Carbon Capture and Storage (OCCS) system designed, constructed, and tested in accordance with the requirements of the ABS *Requirements for Onboard Carbon Capture and Storage*.

REFERENCES

1/4.1 of the *Requirements for Onboard Carbon Capture and Storage*

REMARKS

This notation is mandatory for vessels where an OCCS system is fitted on board.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **EGC-OCCS**, CSR, AB-CM...

Common Notations and Symbols

NOTATION

EGC-OCCS Ready

DESCRIPTION

This notation is assigned to a vessel that has design features suitable to permit conversion at a future date for the installation of an OCCS system. The following optional notations may be assigned based on the level of readiness in accordance with the requirements of the *ABS Requirements for Onboard Carbon Capture and Storage*.

- **EGC-OCCS Ready 1C** indicates a high-level evaluation of the compliance of the basic suitability of a particular vessel design to fit an OCCS system.
- **EGC-OCCS Ready 2D** indicates a detailed evaluation of the compliance of the suitability of a particular vessel design to fit an OCCS system.
- **EGC-OCCS Ready 3** extends the Class approval of the drawings to the installation of parts of the system or complete system on board the vessel including Survey in accordance with applicable requirements of this document and related *Marine Vessel Rules*.

The following descriptive letters will be included in the vessel record when the drawings and supporting documents of the OCCS equipment or system as indicated in the above subgroups has been reviewed and approved by ABS per the applicable ABS Rule/Guide requirements:

<i>System/Component</i>	<i>Descriptive Letter(s)</i>
Hull Structural Arrangement and Reinforcement	HS
OCCS System Configuration and Vessel Integration	SC
Pre-Scrubbing/Quenching system, Absorber and Desorber Systems	CC
CO2 Compression, Refrigeration and Liquefaction Systems	CRL
Chemical Treatment System	C
Liquid CO2 and/or final by-product storage and discharging system	LCS
Exhaust Gas System	EG
Monitoring, Alarm and Control System	MACS

REFERENCES

1/4.2 of the *Requirements for Onboard Carbon Capture and Storage*

REMARKS

This notation is optional.

Example – ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **EGC-OCCS Ready Level 1C**, NBL, SH, SHCM...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **EGC-OCCS Ready Level 2D (CRL)**, NBL, SH, SHCM...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **EGC-OCCS Ready Level 3 (HS)**, NBL, SH, SHCM...

Common Notations and Symbols

NOTATION

EGC-SO_x (M)

EGC-SO_x

EGC-SCR (M)

EGC-SCR

EGC EGR (M)

EGC-EGR

EEMS

DESCRIPTION

EGC-SO_x (M) – This notation is assigned to an exhaust gas cleaning system primarily designed for the reduction of SO_x emissions using exhaust gas scrubbing designed, constructed, and tested in accordance with the statutory emissions performance testing, survey, and certification requirements of the applicable IMO Regulations and Guidelines and the minimum requirements of EGC SO_x scrubbers in 6-3-1/Table 1 of the *ABS Rules for Building and Classing Marine Vessels*.

EGC-SO_x – This notation is assigned to an exhaust gas cleaning system primarily designed for the reduction of SO_x emissions using exhaust gas scrubbing designed, constructed, and tested in accordance with Section 6-3-2 of the *ABS Rules for Building and Classing Marine Vessels*.

EGC-SCR (M) – This notation is assigned to an exhaust gas cleaning system primarily designed for the reduction of NO_x emissions by the use of Selective Catalytic Reduction catalysts designed, constructed, and tested in accordance with the statutory emissions performance testing, survey, and certification requirements of the applicable IMO Regulations and Guidelines and the minimum requirements of EGC SCR Systems in 6-3-1/Table 1 of the *ABS Rules for Building and Classing Marine Vessels*.

EGC-SCR – This notation is assigned to an exhaust gas cleaning system primarily designed for the reduction of NO_x emissions by the use of Selective Catalytic Reduction catalysts designed, constructed, and tested in accordance with Section 6-3-3 of the *ABS Rules for Building and Classing Marine Vessels*.

EGC-EGR (M) – This notation is assigned to an exhaust gas cleaning system primarily designed for the reduction of NO_x emissions by the use of exhaust gas recirculation designed, constructed, and tested in accordance with the statutory emissions performance testing, survey, and certification requirements of the applicable IMO Regulations and Guidelines and the minimum requirements of EGC SCR Systems in 6-3-1/Table 1 of the *ABS Rules for Building and Classing Marine Vessels*.

EGC-EGR – This notation is assigned to an exhaust gas cleaning system primarily designed for the reduction of NO_x emissions by the use of exhaust gas recirculation designed, constructed, and tested in accordance with Section 6-3-4 of the *ABS Rules for Building and Classing Marine Vessels*.

This notation is intended to be applied to those EGR systems that incorporate extensive off-engine systems designed for the purposes of removing the sulfur by-products from the exhaust gases that originate from the fuel and incorporate, for example, water scrubbing and water cleaning systems. Where a water treatment system is incorporated in the EGR system, the washwater discharge criteria is to meet the requirements of IMO Resolution MEPC.184(59).

EEMS – This notation is assigned to a permanently installed exhaust emission monitoring system designed, constructed, and tested in accordance with Section 6-3-5 of the *ABS Rules for Building and Classing Marine Vessels*.

The notation for an exhaust emissions monitoring system may be assigned to a vessel fitted with, or without, an exhaust emission abatement system.

REFERENCES

6-3-1/9.3, 6-3-1/9.5, 6-3-1/9.7, and 6-3-1/9.9 of the *Rules for Building and Classing Marine Vessels*

REMARKS

These notations are optional.

- Example –
- ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **EGC-SO_x (M)**, CSR, AB-CM...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **EGC-SO_x**, CSR, AB-CM...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **EGC-SCR (M)**, CSR, AB-CM...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **EGC-SCR**, CSR, AB-CM...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **EGC-EGR**, CSR, AB-CM...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **EEMS**, CSR, AB-CM...
 - ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **EGC-SO_x**, **EEMS**, CSR, AB-CM...

Common Notations and Symbols

NOTATION

EHS-P

EHS-C

EHS-F

EHS-E

DESCRIPTION

The Enhanced System notation (**EHS**), as a supplement to a **DPS**-series notation, may be assigned to a **DPS-2** or **DPS-3** vessel.

EHS-P (Enhanced Power and Thruster System) – This notation covers the requirements for the power system and thrusters that are beyond those for the **DPS**-series notations.

EHS-C (Enhanced Control System) – This notation covers the requirements on the DP control systems including control computers, position reference systems and sensors, which are beyond the minimum requirements for **DPS**-series notations.

EHS-F (Fire and Flood Protection System) – This notation covers the requirements for fire and flood protection considering the risk level of the areas. This is a supplement for a **DPS-2** system. It is not necessary for a **DPS-3** system, since a **DPS-3** system has higher requirement in this regard.

EHS-E (Enhanced Electrical System) – This notation covers the requirements for the electrical and power management systems that are beyond those for the **DPS**-series notations.

For a vessel with a **DPS-2** notation, the Enhanced Power and Thruster System Notation (**EHS-P**), the Enhanced Control System Notation (**EHS-C**), Fire and Flood Protection (**EHS-F**) Notation or any combination, such as **EHS-PC**, **EHS-PF**, **EHS-PCF**, may be assigned.

For a **DPS-3** vessel, **EHS-F** is not necessary since **DPS-3** has a higher fire protection requirement.

REFERENCES

Subsections 1/3 and 8/1 of the ABS *Guide for Dynamic Positioning Systems*

REMARKS

These notations are optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, ☒ DPS-2 **EHS-PCF**...

☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, ☒ DPS-3 **EHS-C**...

Common Notations and Symbols

NOTATION

ENVIRO

ENVIRO+

EP2020+

DESCRIPTION

ENVIRO – This notation is assigned to a vessel complying with the applicable requirements of Annexes I, II, IV, V, and VI to the International Convention for the Prevention of Pollution from Ships, MARPOL 73/78, as amended and associated ABS requirements which influence environmental protection.

ENVIRO+ – This notation will be assigned to a vessel complying with applicable requirements of the **ENVIRO** notation and Annexes I, II, IV, V, and VI to the International Convention for the Prevention of Pollution from Ships, MARPOL 73/78, as amended and the criteria for environmental protection related to design characteristics, management and support systems, sea discharges, and air discharges specified in the *ABS Guide for the Environmental Protection Notations for Vessels*.

EP2020+ – This notation will be assigned for a refrigeration system where the use of a refrigerant medium exceeds GWP of 2000, provided the refrigerant system complies with all the other conditions and requirements of Subsection 3/25 of the *ABS Guide for the Environmental Protection Notations for Vessels* for **ENVIRO+** notation. This signifies the owner's commitment to replace the existing refrigerant with one having GWP less than or equal to 2000, by the year 2020.

These notations supersede the **ES** and **ES2020** notations for vessels contracted for construction after the effective date of the *ABS Guide for the Environmental Protection Notations for Vessels*.

REFERENCES

1/3.1, 1/3.3, and 4/23.1 of the *Guide for the Environmental Protection Notations for Vessels*

REMARKS

These notations are optional.

Example – ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **ENVIRO**...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **ENVIRO+**...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **ENVIRO+(EP2020+)**...

Common Notations and Symbols

NOTATION

ENVIRO-IDP

DESCRIPTION

ENVIRO-IDP – This notation is assigned to a vessel whose protective oil-to-sea seals and drydock inspections are in compliance with the specific VGP requirements described in the paragraphs 2.2 and 4.1.4 of the VGP 2013, in accordance with Section 6 of the *ABS Guide for the Environmental Protection Notations for Vessels*.

REFERENCES

1/3.11 and Section 6 of the *Guide for the Environmental Protection Notations for Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **ENVIRO-IDP**...

Common Notations and Symbols

NOTATION

ERGO TOP

ERGO ES

ERGO VALVE

ERGO MAINT

DESCRIPTION

ERGO TOP – This notation is directed at assessing the human and topsides structures fit and compatibility, including external ramps, ladders, platforms, and other topsides structures (weather deck area) associated with crew safety and job performance.

ERGO ES – This notation is directed at assessing the human fit and compatibility of areas inside the skin of the vessel on or below the main deck (whether of a ship or an offshore structure). These include interior ramps, passageways, ramps hatches and scuttles, and other structures associated with crew safety and job performance.

ERGO VALVE – This notation is directed at assessing the access and use of operating and maintenance valves with regard to accessibility and ease of identification and use.

ERGO MAINT – This notation is directed at assessing the safety and ease of access to maintenance areas (maintenance platforms, access aids such as ladders, and the size of the maintenance workspace).

REFERENCES

Subsection 1/4 and Section 3, Table 1 of the *ABS Guide for Ergonomic Notations*

REMARKS

These notations are optional.

Example – ☒ A1, Oil Carrier, ⊕, ☒ AMS, ☒ ACCU, CSR, AB-CM, **ERGO TOP...**

☒ A1, Oil Carrier, ⊕, ☒ AMS, ☒ ACCU, CSR, AB-CM, **ERGO ES...**

☒ A1, Oil Carrier, ⊕, ☒ AMS, ☒ ACCU, CSR, AB-CM, **ERGO VALVE...**

☒ A1, Oil Carrier, ⊕, ☒ AMS, ☒ ACCU, CSR, AB-CM, **ERGO MAINT...**

Common Notations and Symbols

NOTATION

ESA

ESA+

DESCRIPTION

Enhanced Shaft Alignment (**ESA**) – This notation is assigned to vessels designed, constructed and operated in compliance with the calculation related sections in the *ABS Guide for Enhanced Shaft Alignment*. The additional shaft alignment installation and measurement related requirements, described in this Guide are not applicable for the **ESA** Notation and instead, the pertinent requirements in 4-3-2/11 of the *ABS Rules for Building and Classing Marine Vessels* apply.

Enhanced Shaft Alignment Plus (**ESA+**) – This notation is assigned to vessels designed, constructed and operated in compliance with all of the Sections of the *ABS Guide for Enhanced Shaft Alignment*, including the installation procedures and sea trial measurement requirements as well as maintenance and survey requirements.

REFERENCES

1/1.1 of the *Guide for Enhanced Shaft Alignment*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **ESA**, CSR, AB-CM ...

✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **ESA+**, CSR, AB-CM...

Common Notations and Symbols

NOTATION

ESP

ESDC

DESCRIPTION

Enhanced Survey Program (**ESP**) – This notation is assigned to Oil Carriers, Bulk Carriers, Ore Carriers, Combination Carriers or Chemical Carriers, all in salt-water service, that are in compliance with the specified survey requirements for the **ESP** notation in the *ABS Rules for Survey After Construction (Part 7)*.

Expanded Survey Program for General Dry Cargo Vessels (**ESDC**) – This notation is assigned to General Dry Cargo Vessels, as defined in 7-1-1/3.33 of the *ABS Rules for Survey After Construction (Part 7)*, in salt-water service, that are in compliance with the specified survey requirements for the **ESDC** notation.

REFERENCES

Section 7-3-2 of the *Rules for Survey After Construction (Part 7)*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory for the vessel types and services listed above in the description section.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **ESP**...

✘ A1, General Dry Cargo Vessel, Ⓢ, ✘ AMS, ✘ ACCU, SH, SHCM, **ESDC**...

Common Notations and Symbols

NOTATION

ESS-LiBATTERY

DESCRIPTION

This notation is assigned to marine and offshore assets designed, constructed, or retrofitted with a lithium-ion battery system used as an additional source of power with a capacity greater than 25 kWh complying with the requirements of the ABS *Requirements for Use of Lithium-ion Batteries in the Marine and Offshore Industries*.

REFERENCES

Subsection 1/3 of the *Requirements for Use of Lithium-ion Batteries in the Marine and Offshore Industries*

REMARKS

This notation is optional. However, the requirements contained in the *Requirements for Use of Lithium-ion Batteries in the Marine and Offshore Industries* are mandatory for lithium-ion battery systems used as an additional source of power with a capacity greater than 25 kWh.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, **ESS-LiBATTERY**, ✘ ACCU, CSR, AB-CM...
✘ A1, Column Stabilized Drilling Unit, (P), ✘ AMS, **ESS-LiBATTERY**...

Common Notations and Symbols

NOTATION

ESS-SC

DESCRIPTION

This notation is assigned to marine and offshore assets designed, constructed, or retrofitted with a supercapacitor system used as an additional source of power with a capacity greater than 50 Wh complying with the requirements of the ABS *Requirements for Use of Supercapacitors in the Marine and Offshore Industries*.

REFERENCES

Subsection 1/3 of the *Requirements for Use of Supercapacitors in the Marine and Offshore Industries*

REMARKS

This notation is optional. However, the requirements contained in the *Requirements for Use of Supercapacitors in the Marine and Offshore Industries* are mandatory for lithium-ion battery systems used as an additional source of power with a capacity greater than 50 Wh.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, **ESS-SC**, ✘ ACCU, CSR, AB-CM...

✘ A1, Column Stabilized Drilling Unit, (P), ✘ AMS, **ESS-SC**...

Common Notations and Symbols

NOTATION

FC-E

FC-NE

DESCRIPTION

Fuel Cell – Essential Service (**FC-E**) – This notation is assigned to vessels arranged to use a fuel cell power system for essential services (primary and secondary) or emergency services in compliance with the *ABS Requirements for Fuel Cell Power Systems for Marine and Offshore Applications*.

Fuel Cell – Non-Essential Service (**FC-NE**) – This notation is assigned to vessels arranged to use a fuel cell power system for non-essential services in compliance with the *ABS Requirements for Fuel Cell Power Systems for Marine and Offshore Applications*.

If the fuel cell is intended for installation on a Gas Carrier or a Gas Fueled Ship, the notations **LFFS** or **GFS** will be assigned in association with **FC-E** or **FC-NE** notation for specific ship type. (e.g., **LFFS(FC-E)**) with descriptive letters introduced in the *Record* identifying the specific low flashpoint fuel used (Methanol/Ethanol/Methane/Propane/Butane/Ammonia/Hydrogen).

REFERENCES

Subsection 1/4 of the *Requirements for Fuel Cell Power Systems for Marine and Offshore Applications*

REMARKS

This notation is optional. However, the requirements contained in the *Requirements for Fuel Cell Power Systems for Marine and Offshore Applications* are mandatory for fuel cell power systems installed on board classed vessels and units as outlined in the document.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, **FC-E**, ✘ ACCU, CSR, AB-CM ...

✘ A1, Oil Carrier, Ⓢ, ✘ AMS, **FC-NE**, ✘ ACCU, CSR, AB-CM...

✘ A1, Container Carrier, Ⓢ, ✘ AMS, **LFFS(FC-E – Hydrogen)**, ✘ ACCU...

Common Notations and Symbols

NOTATION

FL (*years*)

DESCRIPTION

Fatigue Life (FL (*years*)) – This is a notation that denotes a vessel’s design fatigue life is in excess of the minimum fatigue life of 20 years. This notation is eligible for vessels that receive the SafeHull notation provided the excess design fatigue life is verified to be in compliance with the criteria in Appendix 1 of the appropriate Chapter of Part 5C of the ABS *Rules for Building and Classing Marine Vessels* addressing Oil or Fuel Oil Carriers, Bulk or Ore Carriers, Combination Carriers or Container Carriers. The (***years***) refers to the fatigue life equal to 25 years or more (in 5-year increments) as specified by the applicant. This notation is also available for Membrane Tank Liquefied Gas Carriers in accordance with 5C-12-1/1.3 of the ABS *Rules for Building and Classing Marine Vessels* and also for Liquefied Gas Carriers with Independent Tanks in accordance with 1/1.3 of the ABS *Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks* and Asphalt Carriers with Independent Tanks in accordance with 1/1.3 of the ABS *Requirements for Building and Classing Asphalt Carriers with Independent Tanks*.

REFERENCES

5C-1-1/1.2, 5C-3-1/1.2, 5C-5-1/1.2, and 5C-12-1/1.3 of the *Rules for Building and Classing Marine Vessels*

1/1.3 of the *Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks*

1/1.3 of the *Requirements for Building and Classing Asphalt Carriers with Independent Tanks*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **FL(30)**...

Common Notations and Symbols

NOTATION

FTS(ν , ρ , T)

DESCRIPTION

Fuel Treatment System (**FTS**(ν , ρ , T)) – This notation is assigned to vessels with fuel systems and equipment complying with the requirements in 4-6-4/19 of the *ABS Rules for Building and Classing Marine Vessels*. ν is the fuel oil maximum kinematic viscosity at 50°C (122°F) given in cSt, ρ is the fuel oil maximum density at 15°C (59°F) given in kg/m³ (lb/in³), and T is the minimum outside air temperature for which the installations are approved given in °C (°F).

REFERENCES

4-6-4/19 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – \boxtimes A1, Oil Carrier, $\text{\textcircled{E}}$, \boxtimes AMS, \boxtimes ACCU, **FTS(380, 991, 0)**, CSR, AB-CM...

Common Notations and Symbols

NOTATION

GFS

LFFS

RELIQ

GCU

DFD

SGF

DFGT

DESCRIPTION

Gas Fueled Ship (**GFS**) is a mandatory notation assigned to a vessel arranged to burn natural gas as fuel for propulsion or auxiliary purposes the requirements for gas fuel storage, fuel bunkering systems, fuel gas preparation rooms and fuel gas supply system arrangements are to be designed, constructed, and tested in accordance with Part 5C, Chapter 13 of the *ABS Rules for Building and Classing Marine Vessels*.

Low Flashpoint Fueled Ship (**LFFS**) notation is mandatory and will be assigned to a vessel arranged to burn a low flashpoint fuel other than natural gas for propulsion or auxiliary purposes and designed, constructed, and tested in accordance with Part 5C, Chapter 13 of the *ABS Rules for Building and Classing Marine Vessels*, the *ABS Requirements for Methanol and Ethanol Fueled Vessels*, the *ABS Requirements for Ammonia Fueled Vessels*, or the *ABS Requirements for Hydrogen Fueled Vessels*. The **LFFS** notation will be assigned in association with the specific low flashpoint fuel and one or more of the following additional notations (e.g., **LFFS(DFD – Methanol)**, **LFFS(DFD – Ethanol)**, **LFFS(DFD – Ammonia)**, **LFFS(DFD – Hydrogen)**, **LFFS(FC-E – Hydrogen)**).

ReLiquefaction System (**RELIQ**) is an optional notation assigned upon the Client's request to a vessel with a re-liquefaction system designed, constructed, and tested in accordance with 5C-13-6/9.3 and Appendix 5C-13-6A2 of the *ABS Rules for Building and Classing Marine Vessels*. However, where the system is used to comply with 5C-13-6/9.1, the **RELIQ** notation is mandatory.

Gas Combustion Unit (**GCU**) is an optional notation assigned upon the Client's request to a vessel with a gas combustion unit designed, constructed, and tested in accordance with 5C-13-6/9.4 and Appendix 5C-13-6A3 of the *ABS Rules for Building and Classing Marine Vessels*. However, where the unit is used to comply with 5C-13-6/9.1, the **GCU** notation is mandatory.

Dual Fuel Diesel Engine power plant (**DFD**) is a mandatory notation assigned to a vessel with a dual fuel diesel engine power plant is designed, constructed, and tested in accordance with the applicable parts Section 5C-13-10 of the *ABS Rules for Building and Classing Marine Vessels*. Where a dual fuel diesel engine power plant is also designed, constructed and tested in association with 5C-13-1/1.2 for a low flashpoint fuel other than natural gas, the **DFD** notation will be assigned with a note relative to the particular low flashpoint fuel (e.g., **DFD – Methanol**, **DFD – Hydrogen**).

Single Gas Fuel Engine power plant (**SGF**) is a mandatory notation assigned to a vessel with a single gas fuel engine power plant designed, constructed, and tested in accordance with the applicable parts Section 5C-13-10 of the *ABS Rules for Building and Classing Marine Vessels*.

Dual Fuel Gas Turbine power plant (**DFGT**) is a mandatory notation assigned to a vessel with a designed, constructed, and tested in accordance with 5C-13-10/5 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-13-1/1 of the *Rules for Building and Classing Marine Vessels*

Subsection 1/3 of the *Requirements for Methanol and Ethanol Fueled Vessels*

Subsection 1/3 of the *Requirements for Ammonia Fueled Vessels*

Subsection 1/3 of the *Requirements for Hydrogen Fueled Vessels*

REMARKS

Assignment of the **GFS** or **LFFS** notation requires Class Committee approval.

The notations **GFS** and **LFFS** are mandatory for vessels arranged to burn natural gas or other low flashpoint fuel for propulsion or auxiliary purposes.

The **RELIQ** and **GCU** notations can be either optional or mandatory as explained in the Description section above.

The **DFD**, **SGF** and **DFGT** notations are mandatory when this equipment is installed, see the Description section above.

Example – ✘ A1, Offshore Support Vessel (TOW), (E), ✘ AMS, **GFS**, ✘ ACCU...

✘ A1, Container Carrier, (E), ✘ AMS, **GFS(DFD, GCU)**, ✘ ACCU...

✘ A1, Container Carrier, (E), ✘ AMS, **GFS(DFD – Methanol, GCU)**, ✘ ACCU...

✘ A1, Container Carrier, (E), ✘ AMS, **LFFS(DFD – Methanol, GCU)**, ✘ ACCU...

✘ A1, Container Carrier, (E), ✘ AMS, **LFFS(DFD – Ethanol, GCU)**, ✘ ACCU...

✘ A1, Container Carrier, (E), ✘ AMS, **LFFS(DFD – Ammonia, RELIQ)**, ✘ ACCU...

✘ A1, Container Carrier, (E), ✘ AMS, **LFFS(DFD – Hydrogen)**, ✘ ACCU...

Common Notations and Symbols

NOTATION

GRAB [X]

DESCRIPTION

This notation is assigned to vessels to signify that the vessel's inner bottom has been designed for a specific grab weight in metric tons.

REFERENCES

3-2-4/9.5, 3-2-4/9.6, 5A-1-1/3.2.2, and 5C-3-4/7.3.2(a) and 5C-3-4/7.3.2(b) of the *Rules for Building and Classing Marine Vessels*

REMARKS

GRAB [X] is mandatory for ships having one of the additional service features **BC-A** or **BC-B**, according to 5A-1-1/3.2.1. For these ships, the requirements for the **GRAB [X]** notation given in Section 5B-1-6 are to be complied with for an unladen grab weight X taken not less than:

- 35 t for ships with $L \geq 250$ m,
- 30 t for ships with $200 \text{ m} \leq L < 250$ m,
- 20 t otherwise.

For all other vessels, the additional class notation **GRAB [X]** is optional.

Example – ✘ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ✘ AMS,
✘ ACCU, SH, SHCM, **GRAB [25]**...

✘ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ✘ AMS,
✘ ACCU, CSR, AB-CM, **GRAB [25]**...

✘ A1, Offshore Support Vessel, Ⓢ, ✘ AMS, ✘ ACCU, **GRAB [25]**...

Common Notations and Symbols

NOTATION

HAB

HAB+

HAB++

DESCRIPTION

HAB – This notation is assigned to vessels, which comply with the minimum criteria for accommodation area design, whole-body vibration (separate criteria for accommodation areas and workspaces), noise, indoor climate, and lighting as included in the *ABS Guide for Crew Habitability on Ships*.

HAB+ – This notation is assigned to vessels which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration and noise aimed at increasing crew comfort and safety as included in the *ABS Guide for Crew Habitability on Ships*.

HAB++ – This notation is assigned to vessels which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration, noise, and indoor climate as included in the *ABS Guide for Crew Habitability on Ships*.

REFERENCES

Subsection 1/6 of the *Guide for Crew Habitability on Ships*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓔ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **HAB**...
✘ A1, Oil Carrier, Ⓔ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **HAB+**...
✘ A1, Oil Carrier, Ⓔ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **HAB++**...

Common Notations and Symbols

NOTATION

HAB(ACCOM)

HAB+(ACCOM)

HAB++(ACCOM)

DESCRIPTION

HAB(ACCOM) – This notation is assigned to vessels, which comply with the minimum criteria for accommodation area design, whole-body vibration, noise, indoor climate, and lighting as included in the *ABS Guide for Habitability of Industrial Personnel on Offshore Accommodation Vessels*.

HAB+(ACCOM) – This notation is assigned to vessels which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration and noise aimed at increasing personnel comfort and safety as included in the *ABS Guide for Habitability of Industrial Personnel on Offshore Accommodation Vessels*.

HAB++(ACCOM) – This notation is assigned to vessels which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration, and noise as included in the *ABS Guide for Habitability of Industrial Personnel on Offshore Accommodation Vessels*.

REFERENCES

Subsection 1/6 of the *Guide for Habitability of Industrial Personnel on Offshore Accommodation Vessels*

REMARKS

These notations are optional.

Example – ✘ A1, Accommodation Barge, **HAB**...

✘ A1, Column Stabilized Drilling Unit, (P), ✘ AMS, **HAB+**...

✘ A1, Offshore Support Vessel (Supply), (E), ✘ AMS, **HAB++**...

Common Notations and Symbols

NOTATION

HDS

DESCRIPTION

This notation is assigned to vessels built with higher-ductility (HD) steel plates that comply with the requirements of the ABS *Guide for Material Requirements for Higher-Ductility Hull Structural Steel Plates and Sections* and meet the minimum extent for application.

Detailed information on the extent of HD steel can be entered into the *Record* as comments. For example, “HDxx applied to Cargo Tanks and Fuel Oil Tanks”.

REFERENCES

1/7.3 of the *Guide for Material Requirements for Higher-Ductility Hull Structural Steel Plates and Sections*

REMARKS

This notation is optional.

Example – ✘ A1, ☉, Oil Carrier, **HDS**, ✘ AMS, ✘ ACCU...

Common Notations and Symbols

NOTATION

HELIDK

HELIDK(SRF)

DESCRIPTION

HELIDK – This notation is assigned to vessels with a helicopter deck intended for landing with no provision for storage or refueling and complying with Sections 2 and 6 of the *ABS Guide for the Class Notation Helicopter Decks and Facilities (HELIDK and HELIDK(SRF))*.

HELIDK(SRF) – This notation is assigned to vessels with a helicopter deck and a helicopter facility for storage and/or refueling and complying with Sections 2 through 6 of the *ABS Guide for the Class Notation Helicopter Decks and Facilities (HELIDK and HELIDK(SRF))*.

REFERENCES

Subsection 1/3 of the *Guide for the Class Notation Helicopter Decks and Facilities (HELIDK and HELIDK(SRF))*

REMARKS

These notations are optional.

Example – ✘ A1, ☉, Oil Carrier, **HELIDK**, ✘ AMS, ✘ ACCU, CSR, AB-CM...

✘ A1, ☉, Oil Carrier, **HELIDK(SRF)**, ✘ AMS, ✘ ACCU, CSR, AB-CM...

Common Notations and Symbols

NOTATION

HIMP

DESCRIPTION

Hull Inspection and Maintenance Program (HIMP) – This notation signifies that the vessel is enrolled in the Hull Inspection and Maintenance Program in accordance with the ABS *Guide for Hull Inspection and Maintenance Program*.

REFERENCES

Subsection 1/3 of the *Guide for Hull Inspection and Maintenance Program*

REMARKS

This notation is optional.

Example – ✘ A1, Ⓢ, Oil Carrier, **HIMP**, ✘ AMS, ✘ ACCU, CSR, AB-CM...

Common Notations and Symbols

NOTATION

HM1

HM1+R

Slam Warning

Green Seas Warning

Ship Motion

Sea State

Sloshing Monitoring

ACS

MOT

PT

ST

LS

DESCRIPTION

A Classification notation indicating that a vessel is fitted with a hull condition monitoring system for the purpose of motion monitoring and that the system is in accordance with the applicable requirements of the *ABS Guide for Hull Condition Monitoring Systems*. **Slam Warning, Green Seas Warning, Ship Motion, Sloshing Monitoring** or **Sea State** to identify the motion monitoring system provided will follow this notation. An additional notation, **+R**, will be added to the **HM1** notation where provisions for recording data for later evaluation are provided.

In addition, optional descriptive notations specifying the required type of monitoring devices of the monitoring system in compliance with the *ABS Guide for Hull Condition Monitoring Systems*, together with a digit specifying the number of devices installed or the number of measurements, will also be assigned as needed. The symbols include: **MOT** (ship motion sensors), **ACS** (ship acceleration sensors), **PT** (pressure transducers), **ST** (sea state monitoring devices), and **LS** (strain gauges for local stress monitoring).

REFERENCES

Subsection 1/3 of the *Guide for Hull Condition Monitoring Systems*

REMARKS

See also **HM2** and **HM3**

These notations are optional.

Example – ⚡ A1, Oil Carrier, Ⓢ, ⚡ AMS, ⚡ ACCU, **HM1+R (Slam Warning: ACS1, Ship Motion: MOT2, Sea State: ST1)**, HM2+R (Hull Girder Stress: HS2, Local Load Monitoring: LS4), HM3 (VDR, Wind: WD2, Shaft Monitoring: TM2, RC2), CSR, AB-CM...

Common Notations and Symbols

NOTATION

HM2

HM2+R

Hull Girder Stress

Local Load Monitoring

Fatigue Monitor

Structural Temperature Monitoring

LC

HS

LS

TEMP

DESCRIPTION

A Classification notation indicating that a vessel is fitted with a hull stress monitoring system, which may include local stress and fatigue monitoring systems; and that the systems are in accordance with the applicable requirements of the *ABS Guide for Hull Condition Monitoring Systems*. This notation will be followed by **Hull Girder Stress**, **Local Load Monitoring**, **Fatigue Monitor**, **Structural Temperature Monitoring**, or **LC** (loading computer data link) to identify the stress monitoring system provided. An additional notation, **+R**, will be added to the **HM2** notation where provisions for recording data for later evaluation are provided.

In addition, optional descriptive notations specifying the required type of monitoring devices of the monitoring system in compliance with the *ABS Guide for Hull Condition Monitoring Systems*, together with a digit specifying the number of devices installed or the number of measurements, will also be assigned as needed. The symbols include: **HS** (hull girder strain gauges), **LS** (strain gauges for local stress monitoring), and **TEMP** (temperature sensors for structural temperature monitoring).

REFERENCES

Subsection 1/3 of the *Guide for Hull Condition Monitoring Systems*

REMARKS

See also **HM1** and **HM3**

These notations are optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, HM1+R (Slam Warning: ACS1, Ship Motion: MOT2, Sea State: ST1), **HM2+R (Hull Girder Stress: HS2, Local Load Monitoring: LS4)**, HM3 (VDR, Wind: WD2, Shaft Monitoring: TM2, RC2), CSR, AB-CM...

Common Notations and Symbols

NOTATION

HM3

VDR

Enhanced VDR

Navigation

Wind

Shaft Monitoring

SL

WD

TM

RC

DESCRIPTION

A Classification notation indicating that a vessel is fitted with a hull stress monitoring system and associated Voyage Data Recording system; and that the systems are in accordance with the applicable requirements of the *ABS Guide for Hull Condition Monitoring Systems*. This notation will be followed by **VDR**, **Enhanced VDR**, **Navigation**, **Wind**, **Shaft Monitoring**, or **SL** (shore data link) to identify the extent of their recording capability, the time scale of their recording and the survivability of their recordings.

In addition, optional descriptive notations specifying the required type of monitoring devices of the monitoring system in compliance with the *ABS Guide for Hull Condition Monitoring Systems*, together with a digit specifying the number of devices installed or the number of measurements, will also be assigned as needed. The symbols include: **WD** (wind state monitoring devices), **TM** (shaft torque meters), and **RC** (shaft revolution counters).

REFERENCES

Subsection 1/3 of the *Guide for Hull Condition Monitoring Systems*

REMARKS

See also **HM1** and **HM2**

These notations are optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, HM1+R (Slam Warning: ACS1, Ship Motion: MOT2, Sea State: ST1), HM2+R (Hull Girder Stress: HS2, Local Load Monitoring: LS4), **HM3 (VDR, Wind: WD2, Shaft Monitoring: TM2, RC2)**, CSR, AB-CM...

Common Notations and Symbols

NOTATION

HVSC

DESCRIPTION

A Classification notation applicable to vessels equipped with a high voltage shore connection system (HVSC) designed to power the vessel with the shore power alone, enabling the shipboard generators to be shut down while in port, which has been designed, installed and surveyed in accordance with Part 6, Chapter 4 of the ABS *Rules for Building and Classing Marine Vessels*, and when found satisfactory.

REFERENCES

6-4-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory for vessels equipped with a high voltage shore connection designed to power the vessel with shore power alone, enabling the shipboard generators to be shut down while in port.

Example – ✕ A1, Container Carrier, Ⓢ, ✕ AMS, ✕ ACCU, **HVSC**, SH, SHCM...

Common Notations and Symbols

NOTATION

HVSC-Ready

DESCRIPTION

This notation is applicable to vessels been designed for future installation of a high voltage shore connection system (HVSC) designed to power the vessel with the shore power alone, enabling the shipboard generators to be shut down while in port, in accordance with Part 6, Chapter 4 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-4-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **HVSC-Ready**, SH, SHCM...

Common Notations and Symbols

NOTATION

HYBRID IEPS

HYBRID IEPS [*operating mode*]

DESCRIPTION

HYBRID IEPS – This notation is assigned to marine and offshore assets with a system arranged to use one or more sources of power (e.g., energy storage system (ESS) such as lithium-ion battery, supercapacitor, fuel cell system, wind, solar PV, and conventional generation (including shaft generator)), designed, constructed, and tested in accordance with the ABS *Requirements for Hybrid Electric Power Systems for Marine and Offshore Applications*.

HYBRID IEPS [*operating mode*] – This notation is assigned to marine and offshore assets arranged to comply with the requirements for the **HYBRID IEPS** notation, and also fitted with means to operate under one or more specific operating modes as identified in Section 3, Table 2 of the ABS *Requirements for Hybrid Electric Power Systems for Marine and Offshore Applications*.

Operating Modes: Low-Exhaust Emission [**LEE**], Power Management [**PMT**], Power Backup [**PBU**], Power Take-Off/Power Take-In [**PTO/PTI**], Shore Connection [**SCN**]

REFERENCES

Subsection 1/5 of the *Requirements for Hybrid Electric Power Systems for Marine and Offshore Applications*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, ©, ✘ AMS, **HYBRID IEPS**, ✘ ACCU, CSR, AB-CM...

✘ A1, Column Stabilized Drilling Unit, ©, ✘ AMS, **HYBRID IEPS** [**PMT**] ...

Common Notations and Symbols

NOTATION

Ice Breaker

DESCRIPTION

This notation is assigned to a vessel having an operational profile that includes escort or ice management functions, having powering and dimensions that allow it to undertake aggressive operations in ice-covered waters. The classification notation **Ice Breaker** is to be assigned to vessels of **Ice Classes PC1** through **PC7** built to the requirements of Sections 6-1-1, 6-1-2, and 6-1-3 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-1-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for vessels intended to perform escort or ice management operations.

Example – ✘ A1, **Ice Breaker**, Ice Class PC3, ⊕, ✘ AMS...

Common Notations and Symbols

NOTATION

Icebreaker*

DESCRIPTION

This notation is assigned to vessels of **Ice Classes PC1** through **PC7** where the arrangement, powering, and scantlings of the hull structure and propulsion machinery are determined based on the operational profile of the icebreaker and the corresponding ship-ice interaction scenarios in accordance with Section 6-1-5 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-1-5/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✘ A1, **Icebreaker***, Ice Class PC3, ⊕, ✘ AMS...

Common Notations and Symbols

NOTATION

Ice Class IAA (Minimum Engine Output Power XX kW/hp)

Ice Class IA (Minimum Engine Output Power XX kW/hp)

Ice Class IB (Minimum Engine Output Power XX kW/hp)

Ice Class IC (Minimum Engine Output Power XX kW/hp)

Ice Class ID

Ice Class IE

DESCRIPTION

The ice strengthening notations **Ice Class IAA**, **Ice Class IA**, **Ice Class IB**, and **Ice Class IC** are notations that indicate that the vessel is suitable for navigating the waters of the Northern Baltic in winter in accordance with the applicable requirements of Section 6-1-4 of the *ABS Rules for Building and Classing Marine Vessels*.

Ice Class ID, and **Ice Class IE** are notations for vessels operating in very light and extremely light ice conditions in accordance with the applicable requirements of Section 6-1-4 of the *ABS Rules for Building and Classing Marine Vessels*.

The ice strengthening requirements of Section 6-1-4 of the *ABS Rules for Building and Classing Marine Vessels* are in agreement with the Finnish-Swedish Ice Class Rules.

The minimum Rule required engine output power in either kW or hp (**Minimum Engine Output Power XX kW/hp**) is to be specified in the notation.

REFERENCES

6-1-4/3.3 of the *Rules for Building and Classing Marine Vessels*

1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional. However, vessels intended for independent navigation in ice-infested polar waters are to comply with the appropriate requirements of Part 6 of the *ABS Rules for Building and Classing Marine Vessels*. Additional coastal state requirements may apply.

Example – ✘ A1, Oil Carrier, **Ice Class IA (Minimum Engine Output Power 1,520 kW)**, ⊕,
✘ AMS, ✘ ACCU...

✘ A1, Oil Carrier, **Ice Class ID**, ⊕, ✘ AMS, ✘ ACCU...

Common Notations and Symbols

NOTATION

Ice Class PC1

Ice Class PC2

Ice Class PC3

Ice Class PC4

Ice Class PC5

Ice Class PC6

Ice Class PC7

DESCRIPTION

The ice strengthening notations **Ice Class PC1**, **Ice Class PC2**, **Ice Class PC3**, **Ice Class PC4**, **Ice Class PC5**, **Ice Class PC6**, and **Ice Class PC7** are notations that indicate that the vessel is suitable for navigating independently in ice-covered Polar waters in accordance with the applicable requirements of the Sections 6-1-1 through 6-1-3 of the *ABS Rules for Building and Classing Marine Vessels*. See 6-1-1/Table 2 of the *ABS Rules for Building and Classing Marine Vessels* for guidance in selecting the most suitable ice class for the operational regions and periods, and ice conditions.

REFERENCES

6-1-1/3.1 of the *Rules for Building and Classing Marine Vessels*

1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional. However, vessels intended for independent navigation in ice-infested polar waters are to comply with the appropriate requirements of Part 6 of the *ABS Rules for Building and Classing Marine Vessels*. Additional coastal state or IMO Polar Code requirements may apply.

Example – ✘ A1, Oil Carrier, **Ice Class PC1**, Ⓢ, ✘ AMS, ✘ ACCU...

Common Notations and Symbols

NOTATION

IDM-A

DESCRIPTION

Infectious Disease Mitigation – Arrangements (IDM-A) – This notation is assigned to marine and offshore assets complying with the minimum arrangement criteria provided in Sections 2 and 3 of the *ABS Guide for Mitigation of Infectious Disease Transmission on Board Marine and Offshore Assets*.

REFERENCES

Subsection 1/4 of the *Guide for Mitigation of Infectious Disease Transmission on Board Marine and Offshore Assets*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, ⓔ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **IDM-A**...

✘ A1, Column Stabilized Drilling Unit, Ⓟ, ✘ AMS, **IDM-A**...

Common Notations and Symbols

NOTATION

⊗ IE (Pipe Lay)

DESCRIPTION

The notation **⊗ IE (Pipe Lay)** may be assigned to industrial systems and equipment reviewed and approved in accordance with the ABS *Guide for Classification of Industrial Systems and Equipment* and constructed under ABS Survey for installation onboard an ABS classed vessel or unit for a dedicated pipe laying service.

REFERENCES

1-1/5 of the *Guide for Classification of Industrial Systems and Equipment*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊗ A1, Offshore Support Vessel (Pipe Lay), **⊗ IE (Pipe Lay)**, ⊕, ⊗ AMS...
⊗ A1, Column-Stabilized Unit, Pipe Laying Service, **⊗ IE (Pipe Lay)**...

Common Notations and Symbols

NOTATION

IHM

DESCRIPTION

Inventory of Hazardous Materials (IHM) – This notation is applicable to new and existing vessels which have had their Inventory reviewed and verified to the requirements of the *ABS Guide for the Inventory of Hazardous Materials* to the satisfaction of ABS Survey.

- i)* The **IHM** notation is available to vessels contracted for construction on or after the effective date of the *ABS Guide for the Inventory of Hazardous Materials*.
- ii)* The **IHM** notation is also available to Existing vessels subject to compliance with the requirements of 3/4.2.3, along with the ABS requirements specified in 3/4.2.3 of the *ABS Guide for the Inventory of Hazardous Materials*.

This notation supersedes the **GP** notation for vessels contracted for construction after the effective date of the *ABS Guide for the Inventory of Hazardous Materials*.

REFERENCES

Subsection 1/7 of the *Guide for the Inventory of Hazardous Materials*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **IHM**...

Common Notations and Symbols

NOTATION

ILM

(n)

+T

+G

+L

+P

DESCRIPTION

ILM (Basic Ice loads Monitoring System) – This notation is assigned to a vessel having the basic ice loads monitoring system that monitors the hull girder bending stress.

(n) (Number of additional strain gauge locations (e.g., 2, 4 etc.)) – This notation is assigned to a vessel having strain gauge locations in addition to those required for the basic ice loads monitoring system. **(n)** denotes the additional number of additional strain gauge locations.

+T (Turning ice loads monitoring on the quarter) – This notation, in addition to **ILM**, may be assigned to a vessel having ice loads monitoring systems with the additional purpose of monitoring the ice loads induced at the quarters of the vessel due to turning in ice.

+G (Global ice loads monitoring) – This notation, in addition to **ILM**, may be assigned to a vessel having ice loads monitoring systems for hull girder bending and shear monitoring due to operation in ice, typically ramming loads.

+L (Local ice loads recording) – This notation, in addition to **ILM** may be assigned to a vessel having ice loads monitoring systems with the additional purpose of recording the stresses for analysis of ice loads.

+P (Local ice pressure monitoring and recording) – This notation, in addition to **ILM** may be assigned to a vessel having ice loads monitoring systems with the additional purpose of measuring and recording local impact pressures.

REFERENCES

Subsection 1/9 of the *Guide for Ice Loads Monitoring Systems*

REMARKS

These notations are optional.

Example – ⚡ A1, Oil Carrier, Ice Class PC1, Ⓢ, ⚡ AMS, ⚡ ACCU, **ILM(4)+T+G+P...**

Common Notations and Symbols

NOTATION

ISQM

SQM

DESCRIPTION

Classification notations indicating compliance with the procedures and criteria given in the *ABS Guide for Integrated Software Quality Management (ISQM)* for control system software development from the *concept* phase or *Design Group* to the end of the *Verification, Validation and Transition* phase; subsequently, leading to the beginning of operation of the affected system.

ISQM is for integrated control systems and **SQM** is for non-integrated control systems.

REFERENCES

Subsection 1/3 of the *Guide for Integrated Software Quality Management (ISQM)*

REMARKS

These notations are optional.

Example – ☒ A1, Oil Carrier, ⓔ, ☒ AMS, ☒ ACCU, ☒ DPS-1, **ISQM**, CSR, AB-CM...

☒ A1, Container Carrier, ⓔ, ☒ AMS, ☒ ACCU, **SQM**, SH, SHCM...

Common Notations and Symbols

NOTATION

LAID UP

DESCRIPTION

This notation is assigned to vessels that are in lay-up in compliance with Appendix 7-A1-3 “Vessel Lay-Up and Reactivation” of the *ABS Rules for Survey After Construction (Part 7)* or the *ABS Guide for Lay-up and Reactivation of Offshore Support Vessels*. The notation allows for the vessel’s surveys falling due during lay-up to be held in abeyance until the vessel reactivates, at which time they are to be brought up-to-date.

REFERENCES

7-A1-3/1.1 of the *Rules for Survey After Construction (Part 7)*

REMARKS

This notation is optional.

Example – ✘ A1, Ore or Oil Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **LAID UP**...

Common Notations and Symbols

NOTATION

LEV(EU)

LEV(US)

DESCRIPTION

Low Emissions Vessel (LEV) – This notation is assigned to a vessel where the specified internal combustion engines installed on a vessel meet stricter gaseous and particulate pollutant limits than regulated by MARPOL Annex VI, as detailed in Section 4 of the *ABS Guide for the Environmental Protection Notations for Vessels*. Engine emissions meet the corresponding levels for engine size, power and application regulated by other regional, national or local regulatory instruments, for equivalent marine, heavy duty or non-road mobile machinery applications. The optional notation **LEV** will be assigned a descriptor representing the regional, national or local regulatory requirements which are applied to the vessel.

Low Emissions Vessel (EU) (LEV(EU)) – This notation is assigned to a vessel where all identified engines on board the vessel have been certified to meet the EU Stage V emissions limits, as stated in EU Regulation 2016/1628, on the fuels applicable to that regulation, in accordance with Subsection 4/5 of the *ABS Guide for the Environmental Protection Notations for Vessels*.

Low Emissions Vessel (US) (LEV(US)) – This notation is assigned to a vessel where all identified engines over 600 kW on the vessel have been certified to meet the U.S. EPA Tier 4 emissions limits, as stated in US 40 CFR § 1042.101 on the fuels applicable to that regulation, in accordance with Subsection 4/5 of the *ABS Guide for the Environmental Protection Notations for Vessels*.

REFERENCES

1/3.5 of the *Guide for the Environmental Protection Notations for Vessels*

REMARKS

These notations are optional.

Example – ☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **LEV(EU)**...

☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **LEV(US)**...

Common Notations and Symbols

NOTATION

Line Cutter

DESCRIPTION

This notation is assigned to a vessel fitted with line cutters to reduce the risk of propeller entanglement and shaft seal damage caused by line intrusion that comply with the requirements of 4-3-2/17 of the *ABS Rules for Building and Classing Marine Vessels* or the applicable sections of the Rules and Guides listed below.

REFERENCES

4-3-2/17.1 of the *Rules for Building and Classing Marine Vessels*

4-3-1/27.1 of the *Rules for Building and Classing High-Speed Craft*

4-3-2/17.1 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

4-2-1/21.1 of the *Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways*

4-3-2/17.1 of the *Guide for Building and Classing International Naval Ships*

4-3-1/25.1 of the *Guide for Building and Classing Liftboats*

4-3-1/23.1 of the *Rules for Building and Classing Yachts*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **Line Cutter**, SH, SHCM...

Common Notations and Symbols

NOTATION

LSC

LSC(DC)

DESCRIPTION

Loading and Stability Computer Software (**LSC**) – This notation is assigned to vessels equipped with computer software whose functions include longitudinal strength calculations, and stability calculations, which is capable of performing both hull girder loading and stability calculations to verify compliance with the requirements in 3-3-1/19 of the *ABS Rules for Building and Classing Marine Vessels*.

Loading and Stability Computer Software with Damage Control Assessment (**LSC(DC)**) – This notation is assigned to vessels equipped with computer software whose functions include longitudinal strength calculations, and stability calculations, which is capable of performing both hull girder loading and stability calculations and also assesses the actual damage conditions using the input from detection systems installed on the vessel to verify compliance with the requirements in 3-3-1/19 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

3-3-1/19 of the *Rules for Building and Classing Marine Vessels*

REMARKS

The **LSC** notation is mandatory for tankers. The **LSC(DC)** notation is optional.

Example – ☒ A1, Oil Carrier, Ⓢ, **LSC**, ☒ AMS, ☒ ACCU, CSR, AB-CM ...

☒ A1, Container Carrier, Ⓢ, **LSC(DC)**, ☒ AMS, ☒ ACCU, SH, SHCM...

Common Notations and Symbols

NOTATION

LVDC-DIST

DESCRIPTION

A optional notation applicable to marine and offshore assets designed, constructed, or retrofitted with a DC power distribution system, where electrical power sources, vessel major loads, and/or energy storage systems are connected to the DC bus directly or via power electronic converters, and that comply with the requirements of the ABS *Requirements for Direct Current (DC) Power Distribution Systems for Marine and Offshore Applications*.

REFERENCES

Subsection 1/5 of the *Requirements for Direct Current (DC) Power Distribution Systems for Marine and Offshore Applications*

REMARKS

This notation is optional. However, the requirements of the *Requirements for Direct Current (DC) Power Distribution Systems for Marine and Offshore Applications* are mandatory for vessels and units with shipboard low voltage direct-current (DC) power distribution.

Example – ✘ A1, Container Carrier, ⓔ, ✘ AMS, ✘ ACCU, **LVDC-DIST**, SH, SHCM...

Common Notations and Symbols

NOTATION

LVSC

DESCRIPTION

A Classification notation applicable to vessels equipped with a low voltage shore connection system (LVSC) designed to power the vessel with the shore power alone, enabling the shipboard generators to be shut down while in port, which has been designed, installed and surveyed in accordance with Part 6, Chapter 4 of the ABS *Rules for Building and Classing Marine Vessels*, and when found satisfactory.

REFERENCES

6-4-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory for vessels equipped with a low voltage shore connection designed to power the vessel with shore power alone, enabling the shipboard generators to be shut down while in port.

Example – ✕ A1, Container Carrier, Ⓢ, ✕ AMS, ✕ ACCU, **LVSC**, SH, SHCM...

Common Notations and Symbols

NOTATION

LVSC-Ready

DESCRIPTION

This notation is applicable to vessels been designed for future installation of a low voltage shore connection system (LVSC) designed to power the vessel with the shore power alone, enabling the shipboard generators to be shut down while in port, in accordance with Part 6, Chapter 4 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-4-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **LVSC-Ready**, SH, SHCM...

Common Notations and Symbols

NOTATION

MAN

MAN-A

DESCRIPTION

These notations are assigned to a vessel complying with the requirements specified in the *ABS Guide for Vessel Maneuverability*.

MAN – This notation is assigned to a vessel which meets the IMO Standards for Ship Maneuverability [IMO 2002a and IMO 2002b] and if the “overall rating” evaluated by the unique assessment as specified in the Guide is 1 or more.

MAN-A – This notation is assigned to a vessel for which all non-rated criteria are satisfied for the intended service performance and the individual rating of all the rated criteria is 1 or more and the overall rating is 2.5 or more.

REFERENCES

Section 1 of the *Guide for Vessel Maneuverability*

REMARKS

Assignment of the **MAN** notation requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **MAN**, SH, SHCM...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **MAN-A**, SH, SHCM...

Common Notations and Symbols

NOTATION

MLC-ACCOM

MLC-ACCOM(SPS)

MLC-ACCOM(WB)

DESCRIPTION

MLC-ACCOM – This notation is assigned to a vessel complying with the criteria for seafarer accommodation areas and the associated ambient environmental characteristics (i.e., whole-body vibration, noise, indoor climate, and lighting) contained in the *ABS Guide for Compliance with the ILO Maritime Labour Convention, 2006 Title 3 Requirements* relating to Regulation 3.1 of the ILO Maritime Labor Convention (MLC).

MLC-ACCOM(SPS) – This notation is assigned to vessels awarded (or in the process of being awarded) the ABS Classification Notation of **SPS** and meeting all the appropriate criteria in the *ABS Guide for Compliance with the ILO Maritime Labour Convention, 2006 Title 3 Requirements* considering the allowances permitted for special purpose ships as provided in the ILO MLC. These allowances have been included in Appendix 3 of the Guide.

MLC-ACCOM(WB) – This notation is assigned to non-SPS vessels (e.g., offshore/platform support vessels, tow boats, anchor handling vessels, etc.) wanting to demonstrate compliance with the ILO MLC with consideration given to specific flag State ILO MLC guidance, as applicable.

REFERENCES

Subsection 2/2 of the *Guide for Compliance with the ILO Maritime Labour Convention, 2006 Title 3 Requirements*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **MLC-ACCOM**...

✘ A1, Offshore Support Vessel (Pipe Lay), SPS, Ⓢ, ✘ AMS, **MLC-ACCOM(SPS)**...

✘ A1, Towing Vessel, Ⓢ, ✘ AMS, QR, BP(xx), **MLC-ACCOM(WB)**...

Common Notations and Symbols

NOTATION

MOVDK

DESCRIPTION

Movable Deck (MOVDK) – This notation signifies that the vessel’s movable deck(s) (platform(s)) are designed and constructed in accordance with the ABS *Requirements for the Class Notation Movable Decks (Platforms) for Vehicle Loading (MOVDK)*. This notation is applicable to dry cargo vessels, vehicle carriers, steel barges, high-speed craft, light warships, patrol and high-speed naval vessels.

REFERENCES

Subsection 1/3 of the *Requirements for the Class Notation Movable Decks (Platforms) for Vehicle Loading (MOVDK)*

REMARKS

This notation is optional.

Example – ✕ A1, Vehicle Carrier, ⊕, ✕ AMS, ✕ ACCU, **MOVDK**...

Common Notations and Symbols

NOTATION

NBL

DESCRIPTION

Navigation Bridge Layout (**NBL**) – This notation is assigned to vessels having navigational equipment designed and constructed based on sound ergonomic principles and their navigational bridges equipped in compliance with the requirements in Sections 1 and 2 of the *ABS Guide for Bridge Design and Navigational Equipment/Systems*, as applicable, and which have been constructed and installed under ABS survey.

REFERENCES

1/5.1 of the *Guide for Bridge Design and Navigational Equipment/Systems*

REMARKS

See also **NBLES**, **NBLES+**, **NBLES (COS)**, and **NIBS**

This notation is optional.

Example – ✕ A1, Container Carrier, Ⓢ, ✕ AMS, ✕ ACCU, **NBL**, SH, SHCM...

Common Notations and Symbols

NOTATION

NBLES

NBLES+

DESCRIPTION

Navigational **Bridge Layout and Equipment/Systems (NBLES)** – This notation is assigned to vessels having navigational bridges equipped per the requirements specified in Sections 1 through 3 of the *ABS Guide for Bridge Design and Navigational Equipment/Systems*, as applicable, and which have been constructed and installed under ABS survey. Equipment required for **NBLES** is listed in 3/Table 1 (found at the end of Section 3).

Navigational **Bridge Layout and Equipment/Systems Plus (NBLES+)** – This notation is assigned to vessels having met the requirements for **NBLES** notation which are also equipped with additional equipment on bridge wings as specified in 3/Table 2 of the *ABS Guide for Bridge Design and Navigational Equipment/Systems*, as applicable, and which have been constructed and installed under ABS survey. Equipment required for **NBLES+** is listed in 3/Table 2 (found at the end of Section 3).

REFERENCES

1/5.2 and 3/1 of the *Guide for Bridge Design and Navigational Equipment/Systems*

REMARKS

See also **NBL**, **NBLES (COS)**, and **NIBS**

These notations are optional.

Example – ☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **NBLES**, SH, SHCM...

☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **NBLES+**, SH, SHCM...

Common Notations and Symbols

NOTATION

NBLES (COS)

DESCRIPTION

Navigation**al** **B**ridge **L**ayout and **E**quipment/**S**ystems for **C**oastal and **O**ffshore **S**ervice (**NBLES (COS)**) – This notation is assigned to vessels that typically operate in coastal and narrow waters and have their navigational bridges equipped according to Sections 1 through 4 of the *ABS Guide for Bridge Design and Navigational Equipment/Systems*, as applicable, and which have been constructed and installed under ABS survey.

REFERENCES

1/5.3 and 4/1 of the *Guide for Bridge Design and Navigational Equipment/Systems*

REMARKS

See also **NBL**, **NBLES**, **NBLES+**, and **NIBS**

This notation is optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **NBLES (COS)**, SH, SHCM...

Common Notations and Symbols

NOTATION

NIBS

DESCRIPTION

Navigational Integrated Bridge System (**NIBS**) – This notation is assigned to vessels which are fitted with an integrated bridge systems (IBS) for the navigational purpose in compliance with the IMO document SN.1/Circ.288, "Guidelines for Bridge Equipment and Systems, Their Arrangement and Integration (BES)", and are found to comply with the requirements in Sections 1 through 3 and Section 5 of the *ABS Guide for Bridge Design and Navigational Equipment/Systems*, and which have been constructed and installed under ABS survey.

REFERENCES

1/5.3 of the *Guide for Bridge Design and Navigational Equipment/Systems*

REMARKS

See also **NBL**, **NBLES**, **NBLES+**, and **NBLES (COS)**

This notation is optional.

Example – ☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **NIBS**, SH, SHCM...

Common Notations and Symbols

NOTATION

NOx-Tier III

DESCRIPTION

This notation is assigned to a vessel where all marine diesel engines with power output greater than 130 kW, other than those exempted as per Para 1.2 of Regulation 13 of Annex VI of the MARPOL 73/78 Regulations, as applicable, have been certified for compliance with Para 5.1 of Regulation 13 of Annex VI of MARPOL 73/78, and provided with an approved NOx Technical File and Engine International Air Pollution (EIAPP) certification, in compliance with the ABS *Guide for the Environmental Protection Notations for Vessels*.

REFERENCES

1/3.7 and 2/37 of the *Guide for the Environmental Protection Notations for Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **NOx-Tier III**...

Common Notations and Symbols

NOTATION

(OSR-C1)

(OSR-C2)

DESCRIPTION

(OSR-C1) – This notation may be assigned to vessels or barges built in compliance with the *ABS Guide for Vessels with Oil Recovery Capabilities* for recovery of oil of unknown flash points but not outfitted for the same in accordance with Section 4 of the Guide, and other relevant sections of the *Marine Vessel Rules* or *Barge Rules*, as applicable, and approved for oil recovery service at the assigned freeboard.

(OSR-C2) – This notation may be assigned to vessels or barges built in compliance with the *ABS Guide for Vessels with Oil Recovery Capabilities* for recovery of oil having a flash point exceeding 60°C (140°F) but not outfitted for the same in accordance with Section 5, and other relevant sections of the *Marine Vessel Rules* or *Barge Rules*, as applicable, and approved for oil recovery service at the assigned freeboard.

REFERENCES

1/3.1 and 1/3.3 of the *Guide for Vessels with Oil Recovery Capabilities*

REMARKS

These notations are optional.

Example – ☒ A1, Towing Vessel **(OSR-C1)**, Ⓢ, ☒ AMS...

☒ A1, Towing Vessel **(OSR-C2)**, Ⓢ, ☒ AMS...

Common Notations and Symbols

NOTATION

☒ PAS

DESCRIPTION

This notation is assigned to non-self propelled vessels fitted with thrusters intended to assist in maneuvering or propelling while under tow, and the arrangements are in accordance with the applicable requirements of Part 4, Chapter 3 of the *ABS Rules for Building and Classing Marine Vessels*. The Maltese Cross ☒ symbol signifies that compliance with these Rules was verified by ABS during construction of the vessel. This includes survey of the machinery at the manufacturer's plant (where required), during installation on board the vessel; and during trials.

REFERENCES

4-1-1/1.5 and 4-3-5/1.3.2 of the *Rules for Building and Classing Marine Vessels*

4-1-1/1.5 and 4-3-5/1.3.2 of the *Guide for Building and Classing International Naval Ships*

Mobile Offshore Units, Steel Vessels for Service on Rivers and Intracoastal Waterways, Aluminum Vessels, Reinforced Plastic Vessels, Light Warships, Patrol and High-Speed Naval Vessels, High-Speed Craft, and Yachts will also be eligible for this notation provided the systems and the equipment are in full compliance with the applicable requirements 4-3-5/1.3.2 of the *ABS Rules for Building and Classing Marine Vessels*.

REMARKS

This notation is optional.

Example – ☒ A1, Chemical Tank Barge, ☒ PAS...

Common Notations and Symbols

NOTATION

PMP

PMP+

DESCRIPTION

The optional notations below may be assigned at the request of the owner to vessels that are in compliance with the requirements for the **Preventative Maintenance Program** in the *ABS Rules for Survey After Construction (Part 7)* on one or more item(s) of all classed equipment subject to Continuous Survey-Machinery (CMS). The notation indicates less than 50% of all classed equipment is enrolled into this program. The notation with “+” appended indicates more than 50% of all equipment subject to CMS is enrolled into the program.

PMP or **PMP+** – This notation is assigned to vessels that are in compliance with the requirements for the **Preventative Maintenance Program** for Planned Maintenance and/or condition monitoring (CM) or both (PM/CM).

REFERENCES

7-A1-14/1.5 of the *Rules for Survey After Construction (Part 7)*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, ⊕, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP**...
✘ A1, Oil Carrier, ⊕, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP+**...
✘ A1, Column-Stabilized Drilling Unit, ⊕, ✘ AMS, ✘ ACCU, **PMP**...

Common Notations and Symbols

NOTATION

PMP-CBM

PMP-CBM+

DESCRIPTION

The optional notation below may be assigned at the request of the owner to vessels that are in compliance with the requirements for the **Preventative Maintenance Program** in the *ABS Rules for Survey After Construction (Part 7)* on one or more item(s) of all classed equipment subject to Continuous Survey-Machinery (CMS). The notation indicates less than 50% of all classed equipment is enrolled into this program. The notation with “+” appended indicates more than 50% of all equipment subject to CMS is enrolled into the program.

PMP-CBM – This notation is assigned to vessels that are in compliance with the requirements of 7-A1-14/5 “Preventative Maintenance Program for Condition Based Maintenance” utilizing real-time monitoring (RTM).

REFERENCES

7-A1-14/1.5 of the *Rules for Survey After Construction (Part 7)*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-CBM...**
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-CBM+...**
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-CBM...**
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-CBM+...**

Common Notations and Symbols

NOTATION

PMP-RBMD

PMP-RBMD+

DESCRIPTION

The optional notations below may be assigned at the request of the owner to vessels that are in compliance with the requirements for the **Preventative Maintenance Program** in the *ABS Rules for Survey After Construction (Part 7)* on one or more item(s) of all classed equipment subject to Continuous Survey-Machinery (CMS). The notation indicates less than 50% of all classed equipment is enrolled into this program. The notation with “+” appended indicates more than 50% of all equipment subject to CMS is enrolled into the program.

PMP-RBMD or **PMP-RBMD+** – This notation is assigned to vessels that are in compliance with Section 3 “Reliability Based Maintenance” and Section 2, “Design for Reliability” of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*. Design for reliability (DFR) refers to the incorporation of reliability-enhancing strategies and practices into the design, manufacture and capital equipment procurement procedures.

Note: In order to qualify for a notation assigned under the requirements of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*, a vessel is required to be assigned with a **PMP** notation in accordance with the Preventative Maintenance Program in Appendix 7-A1-14 of the *ABS Rules for Survey After Construction (Part 7)*.

REFERENCES

7-A1-14/1.5 of the *Rules for Survey After Construction (Part 7)*

Subsection 1/8 of the *Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RBMD**...
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RBMD+**...
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RBMD**...
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RBMD+**...

Common Notations and Symbols

NOTATION

PMP-RCMD

PMP-RCMD+

DESCRIPTION

The optional notations below may be assigned at the request of the owner to vessels that are in compliance with the requirements for the **Preventative Maintenance Program** in the *ABS Rules for Survey After Construction (Part 7)* on one or more item(s) of all classed equipment subject to Continuous Survey-Machinery (CMS). The notation indicates less than 50% of all classed equipment is enrolled into this program. The notation with “+” appended indicates more than 50% of all equipment subject to CMS is enrolled into the program.

PMP-RCMD or **PMP-RCMD+** – This notation is assigned to vessels that are in compliance with Section 4 “Reliability Centered Maintenance” and Section 2, “Design for Reliability” of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*. Design for reliability (DFR) refers to the incorporation of reliability-enhancing strategies and practices into the design, manufacture and capital equipment procurement procedures.

Note: In order to qualify for a notation assigned under the requirements of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*, a vessel is required to be assigned with a **PMP** notation in accordance with the Preventative Maintenance Program in Appendix 7-A1-14 of the *ABS Rules for Survey After Construction (Part 7)*.

REFERENCES

7-A1-14/1.5 of the *Rules for Survey After Construction (Part 7)*

Subsection 1/8 of the *Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RCMD**...
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RCMD+** ...
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RCMD**...
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RCMD+**...

Common Notations and Symbols

NOTATION

PMP-RBM

PMP-RBM+

DESCRIPTION

The optional notations below may be assigned at the request of the owner to vessels that are in compliance with the requirements for the **Preventative Maintenance Program** in the *ABS Rules for Survey After Construction (Part 7)* on one or more item(s) of all classed equipment subject to Continuous Survey-Machinery (CMS). The notation indicates less than 50% of all classed equipment is enrolled into this program. The notation with “+” appended indicates more than 50% of all equipment subject to CMS is enrolled into the program.

PMP-RBM or **PMP-RBM+** – This notation is assigned to vessels that are in compliance with the requirements of Section 3 “Reliability Based Maintenance” of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques* and applicable sections of Appendix 7-A1-14 of the *ABS Rules for Survey After Construction (Part 7)*.

Note: In order to qualify for a notation assigned under the requirements of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*, a vessel is required to be assigned with a **PMP** notation in accordance with the Preventative Maintenance Program in Appendix 7-A1-14 of the *ABS Rules for Survey After Construction (Part 7)*.

REFERENCES

7-A1-14/1.5 of the *Rules for Survey After Construction (Part 7)*

Subsection 1/8 of the *Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RBM...**
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RBM+...**
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RBM...**
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RBM+...**

Common Notations and Symbols

NOTATION

PMP-RCM

PMP-RCM+

DESCRIPTION

The optional notations below may be assigned at the request of the owner to vessels that are in compliance with the requirements for the **Preventative Maintenance Program** in the *ABS Rules for Survey After Construction (Part 7)* on one or more item(s) of all classed equipment subject to Continuous Survey-Machinery (CMS). The notation indicates less than 50% of all classed equipment is enrolled into this program. The notation with “+” appended indicates more than 50% of all equipment subject to CMS is enrolled into the program.

PMP-RCM or **PMP-RCM+** – This notation is assigned to vessels that are in compliance with the requirements of Section 4 “Reliability Centered Maintenance” of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques* and applicable sections of Appendix 7-A1-14 of the *ABS Rules for Survey After Construction (Part 7)*.

Note: In order to qualify for a notation assigned under the requirements of the *ABS Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*, a vessel is required to be assigned with a **PMP** notation in accordance with the Preventative Maintenance Program in Appendix 7-A1-14 of the *ABS Rules for Survey After Construction (Part 7)*.

REFERENCES

7-A1-14/1.3 of the *Rules for Survey After Construction (Part 7)*

Subsection 1/8 of the *Guide for Surveys Based on Machinery Reliability and Maintenance Techniques*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RCM**...
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, ESP, **PMP-RCM+**...
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RCM**...
✘ A1, Column-Stabilized Drilling Unit, Ⓢ, ✘ AMS, ✘ ACCU, **PMP-RCM+**...

Common Notations and Symbols

NOTATION

PMP-CBM, SMART (SHM)

PMP, SMART (MHM)

PMP-CBM, SMART (MHM)

PMP+, SMART (MHM)

PMP-CBM+, SMART (MHM)

DESCRIPTION

The optional notations below may be assigned at the request of the owner to vessels that are enrolled in the alternate means to credit survey requirements.

PMP-CBM, SMART (SHM) – This notation indicates that hull or local structures monitored are enrolled in the alternate means to credit survey requirements, in accordance with Subsection 4/9 of the *ABS Guide for Smart Functions for Marine Vessels and Offshore Units*.

PMP, SMART (MHM), PMP-CBM, SMART (MHM), PMP+, SMART (MHM), PMP-CBM+, SMART (MHM) – These notations indicate that machinery items enrolled in a Preventative Maintenance Program (PMP) in accordance with the requirements of Appendix 7-A1-14 of the *Rules for Survey After Construction (Part 7)* are enrolled in the alternate means to credit survey requirements, in accordance with Subsection 5/10 of the *ABS Guide for Smart Functions for Marine Vessels and Offshore Units*.

REFERENCES

7-A1-14/1.5 of the *Rules for Survey After Construction (Part 7)*

Subsections 4/9. 5/10 of the *Guide for Smart Functions for Marine Vessels and Offshore Units*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **PMP-CBM, SMART (SHM)**...
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **PMP, SMART (MHM)**...
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **PMP-CBM, SMART (MHM)**...
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **PMP+, SMART (MHM)**...
✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **PMP-CBM+, SMART (MHM)**...

Common Notations and Symbols

NOTATION

POLAR(Category, PST)

POLAR Ready(Category, PST)

DESCRIPTION

POLAR(Category, PST) – This notation indicates compliance with the IMO International Code for Ships Operating in Polar Waters (Polar Code) as specified in Section 11 of the *ABS Guide for Vessels Operating in Low Temperature Environments*.

POLAR Ready(Category, PST) – This notation indicates the owners/operators of a vessel have not yet conducted an Operational Assessment and written a Polar Water Operations Manual, but all minimum required equipment is on board for Polar Code compliance.

The “**Category, PST**” in the parentheses refer to the Polar Code defined ship Category and the Polar Service Temperature as specified in 11/3.1 of the *ABS Guide for Vessels Operating in Low Temperature Environments*.

REFERENCES

Subsections 1/3, 11/3 of the *Guide for Vessels Operating in Low Temperature Environments*

REMARKS

See Part 6, Chapter 1 of the *ABS Rules for Building and Classing Marine Vessels* for the notations for ice strengthening and their requirements.

These notations are optional.

- Example –
- ☒ A1, Oil Carrier, (E), ☒ AMS, ☒ ACCU, **POLAR(C, -15)** ...
 - ☒ A1, Oil Carrier, Ice Class PC6, (E), ☒ AMS, ☒ ACCU, **POLAR(B, -15)**...
 - ☒ A1, Oil Carrier, Ice Class PC1, (E), ☒ AMS, ☒ ACCU, **POLAR(A, -15)**...
 - ☒ A1, Oil Carrier, (E), ☒ AMS, ☒ ACCU, **POLAR Ready(C, N/A)** ...
 - ☒ A1, Oil Carrier, Ice Class PC6, (E), ☒ AMS, ☒ ACCU, **POLAR Ready(B, N/A)**...
 - ☒ A1, Oil Carrier, Ice Class PC1, (E), ☒ AMS, ☒ ACCU, **POLAR Ready(A, N/A)**...
 - ☒ A1, Oil Carrier, (E), ☒ AMS, ☒ ACCU, **POLAR Ready(C, -25)** ...
 - ☒ A1, Oil Carrier, Ice Class PC6, (E), ☒ AMS, ☒ ACCU, **POLAR Ready(B, -25)**...
 - ☒ A1, Oil Carrier, Ice Class PC1, (E), ☒ AMS, ☒ ACCU, **POLAR Ready(A, -25)**...

Common Notations and Symbols

NOTATION

PORT

DESCRIPTION

This notation is assigned to vessels fitted with automatic and remote control and monitoring system installations which are found to comply with the requirements of the *ABS Guide for Automatic or Remote Control and Monitoring Systems for Vessels in Port* and which have been installed and tested under survey by the Surveyor.

REFERENCES

1A-1-3/29 of the *Rules for Conditions of Classification (Part 1A)*

1C-1-3/19 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

1.3 of the *Guide for Automatic or Remote Control and Monitoring Systems for Vessels in Port*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **PORT**, SH, SHCM...

Common Notations and Symbols

NOTATION

POT

DESCRIPTION

Protection of Fuel and Lubricating Oil Tanks (**POT**) – This notation is assigned to vessels having an aggregate fuel oil capacity of 600 m³ (21,190 ft³) and above with fuel oil and lubricating oil tanks arranged in accordance with the requirements specified in 4-6-4/17.5 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

4-6-4/17.5 of the *Rules for Building and Classing Marine Vessels*

4-6-4/17.5 of the *Guide for Building and Classing International Naval Ships*

4-2-5/13 of the *Rules for Building and Classing Mobile Offshore Units*

4-4-4/11.5 of the *Rules for Building and Classing High-Speed Craft*

REMARKS

This notation is optional. However, MARPOL requires the protection of fuel oil tanks for most large vessels.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, **POT**, SH, SHCM...

Common Notations and Symbols

NOTATION

Power Service

☒ **Power Plant**

DESCRIPTION

Power Service – This notation is assigned to power service vessels including power service barges, power service ships, power service offshore installations, power service mobile offshore units, and other vessels converted for power service that comply with Sections 1 through 4 and 6 of the *ABS Requirements for Power Service for Marine and Offshore Applications*.

Power Plant – This notation is assigned to power generation and distribution equipment, systems, subsystems, and components that have been built, installed, and commissioned to the satisfaction of the Surveyors to the full requirements in Sections 5 and 6 of the *ABS Requirements for Power Service for Marine and Offshore Applications*.

REFERENCES

Subsection 1/5 of the *Requirements for Power Service for Marine and Offshore Applications*

REMARKS

Assignment of these notations requires Class Committee approval.

The **Power Service** notation is mandatory for power service vessels and units. The **Power Plant** notation is optional.

Example – ☒ A1, Barge, **Power Service** ...

☒ A1, Barge, River Service, **Power Service** ...

☒ A1, Floating Offshore Installation (Ship-Type) (CI), **Power Service** ...

☒ A1, Barge, Power Service, ☒ **Power Plant** ...

Common Notations and Symbols

NOTATION

R1

R1+

DESCRIPTION

A Classification notation addressing redundancy arrangements and indicating that a vessel is fitted with multiple propulsion machines but only one propulsor and steering system, and that the arrangements are in accordance with the applicable requirements of Section 4-3-7 of the *ABS Rules for Building and Classing Marine Vessels*.

The mark + will be added to the **R1** notation to denote that the vessel's propulsion capability is such that, upon a single failure, propulsive power can be maintained or immediately restored to the extent necessary to withstand adverse weather conditions without drifting in accordance with 4-3-7/7.3. The lack of the mark + indicates that the vessel is not intended to withstand the adverse weather conditions in 4-3-7/7.3, but can maintain course and maneuverability at a reduced speed under normal expected weather conditions in accordance with 4-3-7/7.1.

REFERENCES

4-3-7/3 of the *Rules for Building and Classing Marine Vessels*

4-3-6/3 of the *Guide for Building and Classing International Naval Ships*

4-3-5/3 of the *Rules for Building and Classing High-Speed Craft*

4-3-7/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

These notations are optional.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, **R1**, SH, SHCM...

Common Notations and Symbols

NOTATION

R1-S

R1-S+

DESCRIPTION

A Classification notation addressing redundancy arrangements and indicating that a vessel is fitted with a single propulsor but has the propulsion machinery arranged in separate spaces such that a fire or flood in one space will not affect the propulsion machinery in the other space and that the arrangements are in accordance with the applicable requirements of Section 4-3-7 of the *ABS Rules for Building and Classing Marine Vessels*.

The mark **+** will be added to the **R1-S** notation to denote that the vessel's propulsion capability is such that, upon a single failure, propulsive power can be maintained or immediately restored to the extent necessary to withstand adverse weather conditions without drifting in accordance with 4-3-7/7.3. The lack of the mark **+** indicates that the vessel is not intended to withstand the adverse weather conditions in 4-3-7/7.3, but can maintain course and maneuverability at a reduced speed under normal expected weather conditions in accordance with 4-3-7/7.1.

REFERENCES

4-3-7/3 of the *Rules for Building and Classing Marine Vessels*

4-3-6/3 of the *Guide for Building and Classing International Naval Ships*

4-3-5/3 of the *Rules for Building and Classing High-Speed Craft*

4-3-7/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **R1-S**, CSR, AB-CM...

Common Notations and Symbols

NOTATION

R2

R2+

DESCRIPTION

A Classification notation addressing redundancy arrangements and indicating that a vessel is fitted with multiple propulsion machines and multiple propulsors and steering system, and that the arrangements are in accordance with the applicable requirements of Section 4-3-7 of the *ABS Rules for Building and Classing Marine Vessels*.

The mark + will be added to the **R2** notation to denote that the vessel's propulsion capability is such that, upon a single failure, propulsive power can be maintained or immediately restored to the extent necessary to withstand adverse weather conditions without drifting in accordance with 4-3-7/7.3. The lack of the mark + indicates that the vessel is not intended to withstand the adverse weather conditions in 4-3-7/7.3, but can maintain course and maneuverability at a reduced speed under normal expected weather conditions in accordance with 4-3-7/7.1.

REFERENCES

4-3-7/3 of the *Rules for Building and Classing Marine Vessels*

4-3-6/3 of the *Guide for Building and Classing International Naval Ships*

4-3-5/3 of the *Rules for Building and Classing High-Speed Craft*

4-3-7/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

These notations are optional.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, **R2+**, SH, SHCM...

Common Notations and Symbols

NOTATION

R2-S

R2-S+

DESCRIPTION

A Classification notation addressing redundancy arrangements and indicating that a vessel is fitted with multiple machines and propulsors, and associated steering systems arranged in separate spaces such that a fire or flood in one space will not affect the propulsion machinery in the other space; and that the arrangements are in accordance with the applicable requirements of Section 4-3-7 of the *ABS Rules for Building and Classing Marine Vessels*.

The mark + will be added to the **R2-S** notation to denote that the vessel's propulsion capability is such that, upon a single failure, propulsive power can be maintained or immediately restored to the extent necessary to withstand adverse weather conditions without drifting in accordance with 4-3-7/7.3. The lack of the mark + indicates that the vessel is not intended to withstand the adverse weather conditions in 4-3-7/7.3, but can maintain course and maneuverability at a reduced speed under normal expected weather conditions in accordance with 4-3-7/7.1.

REFERENCES

4-3-6/3 of the *Rules for Building and Classing Marine Vessels*

4-3-6/3 of the *Guide for Building and Classing International Naval Ships*

4-3-5/3 of the *Rules for Building and Classing High-Speed Craft*

4-3-7/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

These notations are optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **R2-S+**, SH, SHCM...

Common Notations and Symbols

NOTATION

REMSUR1

REMSUR2

DESCRIPTION

These notations may be assigned to marine vessels, government vessels, and offshore assets complying with the requirements specified in the *ABS Guide for Remote Surveys and Audits*.

REMSUR1 – This notation is assigned to a vessel which is considered to have capabilities and ICT for facilitating the execution of remote surveys/audits for scheduled surveys or audits but is not eligible for consecutive surveys/audits.

REMSUR2 – This notation is assigned to a vessel which is considered to have capabilities and ICT for facilitating the execution of remote surveys/audits for scheduled surveys or audits and is eligible for scheduled classification and statutory surveys/audits remotely for consecutive surveys subject to the concurrence of the flag Administration for statutory surveys/audits.

REFERENCES

Section 1 of the *Guide for Remote Surveys and Audits*

REMARKS

These notations are optional.

Example – ☒ A1, Container Carrier, Ⓢ, ☒ AMS, ☒ ACCU, SH, SHCM, **REMSUR1**...

☒ A1, Column Stabilized Drilling Unit, Ⓢ, ☒ AMS, **REMSUR2**...

Common Notations and Symbols

NOTATION

RES

DESCRIPTION

Residual Strength (RES) – This notation is assigned to Oil or Fuel Oil Carriers, Bulk or Ore Carriers, combination carriers and Container Carriers which have been built in accordance with the procedure and criteria for calculating and evaluating the residual strength of hull structures as per the *ABS Guide for Assessing Hull-Girder Residual Strength*.

REFERENCES

5C-1-2/1.7, 5C-3-2/1.7 and 5C-5-2/1.7 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **RES**...

Common Notations and Symbols

NOTATION

RRDA

DESCRIPTION

Rapid Response Damage Assessment (RRDA) – This notation is assigned to vessels which have been classed in compliance with the ABS *Guide for Rapid Response Damage Assessment*.

REFERENCES

Subsection 1/3 of the *Guide for Rapid Response Damage Assessment*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **RRDA**...

Common Notations and Symbols

NOTATION

RW

DESCRIPTION

The notation **RW** for **Reduced Weight** anchors is a notation, for vessels receiving the **Ⓔ** symbol, assigned for specially considered anchors of proven superior holding ability for which the mass may be reduced up to a maximum of 25% from the mass specified in 3-5-1/Table 1 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

3-5-1/7 of the *Rules for Building and Classing Marine Vessels*

3-4-1/15 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

This notation is mandatory for vessels fitted with reduced weight anchors and required to receive the **Ⓔ** notation.

Example – **⊠** A1, Container Carrier, **Ⓔ**, **RW**, **⊠** AMS...

Common Notations and Symbols

NOTATION

S

SQ, SE, SEn, HS

SQE, SQEn, SEEn, HSQ, HSE, HSEn

SQEEEn, HSEEn, HSQEn, HSQE

HSQEEEn

DESCRIPTION

Notations assigned to a vessel to recognize that the classed vessel meets the applicable requirements of the *ABS Guide for Marine Health, Safety, Quality, Environmental, and Energy Management (The ABS Guide for Marine Management Systems)* as follows:

S	Safety requirements
SQ	Safety and quality requirements
SE	Safety and environmental requirements
SEn	Safety and energy requirements
HS	Safety and health requirements
SQE	Safety, quality and environmental requirements
SQEn	Safety, quality and energy requirements
SEEn	Safety, environmental and energy requirements
HSQ	Safety, health, and quality requirements
HSE	Safety, health, and environmental requirements
HSEn	Safety, health and energy requirements
SQEEEn	Safety, quality, environmental and energy requirement
HSEEn	Safety, health, environmental and energy requirements
HSQEn	Safety, health, quality, and energy requirements
HSQE	Safety, health, quality, and environmental requirements
HSQEEEn	Safety, health, quality, environmental and energy requirements

REFERENCES

1/1.2.1 of the *Guide for Marine Health, Safety, Quality, Environmental, and Energy Management (The ABS Guide for Marine Management Systems)*

REMARKS

These notations are optional.

Example – **SQ, SQE, HSQE, HSQEEEn...**

Note: These notations appear only in the *ABS Record*.

Common Notations and Symbols

NOTATION

SEC

DESCRIPTION

The Ship Security notation (**SEC**) is assigned to all types of ships and mobile offshore drilling units complying with the ABS *Guide for Ship Security (SEC) Notation* for which the requirements have been derived from Chapter XI-2 of SOLAS, Parts A and B of the ISPS Code and 33 CFR Subchapter H of the USCG Regulations.

REFERENCES

Subsection 1/1 of the *Guide for Ship Security (SEC) Notation*

REMARKS

This notation is optional.

Example – **SEC**...

Note: This notation appears only in the *ABS Record*.

Common Notations and Symbols

NOTATION

SElev

DESCRIPTION

Shipboard **Elevator (SElev)** – This notation signifies that the vessel's or unit's installed shipboard elevator is certified by ABS in accordance with Chapter 5 of the *ABS Guide for Certification of Lifting Appliances*.

REFERENCES

1-1/9.5 of the *Guide for Certification of Lifting Appliances*

REMARKS

This notation is optional.

Example – ☒ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), ⓔ, ☒ AMS,
☒ ACCU, SH, SHCM, **SElev**...

Common Notations and Symbols

NOTATION

SFA(years)

DESCRIPTION

Spectral Fatigue Analysis (**SFA**) – This notation is assigned to vessels where Spectral Fatigue Analysis is conducted in accordance with the procedures included in the *ABS Guide for Spectral-Based Fatigue Analysis for Vessels* or equivalent, and the vessel is built in accordance with plans approved on the basis of the results of such analysis. The vessel will be distinguished in the *Record* by the notation **SFA(years)**. The notation, **SFA(years)** denotes that the designated fatigue life value is equal to 20 years or greater under the wave conditions of unrestricted service defined in Section 5, Table 1 of the *ABS Guide for Spectral-Based Fatigue Analysis for Vessels*. The **(years)** refers to the designated fatigue life equal to 20 years or more (in 5-year increments) as specified by the applicant.

REFERENCES

1A-1-3/21 of the *Rules for Conditions of Classification (Part 1A)*

1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

Subsection 1/1 of the *Guide for Spectral-Based Fatigue Analysis for Vessels*

REMARKS

This notation is optional. However, this is mandatory for container carriers with length over 350 m and ore and ore/oil carriers with length over 300 m..

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **SFA(30)**...

Common Notations and Symbols

NOTATION

SFA(years, WWT)

DESCRIPTION

Spectral Fatigue Analysis (Worldwide Trading) – This notation is assigned to vessels where Spectral Fatigue Analysis is conducted in accordance with the procedures included in the *ABS Guide for Spectral-Based Fatigue Analysis for Vessels* or equivalent, and the vessel is built in accordance with plans approved on the basis of the results of such analysis. The vessel will be distinguished in the *Record* by the notation **SFA (years, WWT)**. The notation, **SFA (years, WWT)** denotes that the designated fatigue life value is equal to 40 years or greater under the wave conditions of worldwide trading service defined in Section 5, Table 2 of the *ABS Guide for Spectral-Based Fatigue Analysis for Vessels*. The **(years)** refers to the designated fatigue life equal to 40 years or more (in 5-year increments) as specified by the applicant.

REFERENCES

Subsection 1/1 of the *Guide for Spectral-Based Fatigue Analysis for Vessels*

REMARKS

This notation is optional.

Example – ✕ A1, Container Carrier, Ⓢ, ✕ AMS, ✕ ACCU, SH, SHCM, **SFA(45, WWT)**...

Common Notations and Symbols

NOTATION

SH, SHCM

DESCRIPTION

SafeHull (SH) – The SafeHull notation is assigned to Oil or Fuel Oil Carriers, Bulk or Ore Carriers, Combination Carriers and Container Carriers designed to Part 5C, Chapters 1, 3 and 5 of the *ABS Rules for Building and Classing Marine Vessels*, respectively. Also, the **SH** notation may be assigned to Membrane Tank LNG Carriers designed in accordance with Part 5C, Chapter 12 of the *ABS Rules for Building and Classing Marine Vessels*. The **SH** notation applies to Container Vessels over 130 m, Bulk Carriers, Oil Carriers and Membrane Tank LNG Carriers over 150 m in length and Liquefied Gas Carriers with Independent Tanks over 90 m in length. The requirements of these portions of the Rules are collectively referred to as the SafeHull Criteria.

SafeHull Construction Monitoring (SHCM) – This notation is assigned to vessels that have been found in compliance with Part 5C, Appendix 1, “SafeHull Construction Monitoring Program” of the *ABS Rules for Building and Classing Marine Vessels* and assigned the SafeHull notation **SH**. This notation is required for Oil or Fuel Oil Carriers, Bulk or Ore Carriers, Combination Carriers and Container Carriers designed to Part 5C, Chapters 1, 3 and 5 of *ABS Rules for Building and Classing Marine Vessels*, respectively. The **SHCM** notation is also required for Membrane Tank LNG Carriers that have been designed in accordance with the Part 5C, Chapter 12 of the *ABS Rules for Building and Classing Marine Vessels* and assigned the SafeHull notation **SH** and for Liquefied Gas Carriers with Independent Tanks that have been design in accordance with the *ABS Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks* and assigned the SafeHull notation **SH**. In addition, the classification notation **SH, SHCM** is to be assigned to asphalt carriers having lengths of 150 m (492 ft) and above.

For barges, where the hull structure is similar to that of a typical gas carrier, the scantling requirements in Part 5C of the *Marine Vessel Rules* or the *ABS Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks (LGC Guide)*, as applicable, may be applied in lieu of these Rules; including welding requirements, corrosion margins, and plate renewal criteria. Barges in full compliance with Part 5C of the *Marine Vessel Rules* or the *LGC Guide*, as applicable, will be eligible to receive the **SH, SHCM** notations.

These notations are available for vehicle carriers that comply with the *Guide for Alternative Requirements for Hull Construction of Vessels Intended to Carry Vehicles (130 meters or More in Length)*.

The notations **SH** and **SHCM** are always used in association with each other.

Note: CSR vessels are not eligible for **SH, SHCM** notation.

REFERENCES

1A-1-3/25 of the *Rules for Conditions of Classification (Part 1A)*

5C-1-1/1.1, 5C-3-1/1.1, 5C-5-1/1.1, 5C-12-1/1.1, and Part 5C, Appendix 1 of the *Rules for Building and Classing Marine Vessels*

1/1.1 of the *Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks*

1/1.1 of the *Requirements for Building and Classing Asphalt Carriers with Independent Tanks*

5-3-1/9.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory for the vessel types and lengths outlined above. However, they are optional for vehicle carriers with length over 130 meters and barges.

Example – ✕ A1, Container Carrier, Ⓜ, ✕ AMS, ✕ ACCU, **SH, SHCM...**

Common Notations and Symbols

NOTATION

SHR

DESCRIPTION

This notation is assigned to vessels built to the satisfaction of the ABS Surveyors in accordance with plans that have been approved to the Rules of another recognized classification society, and the vessel's scantlings within $0.4L$ amidships have been reviewed by ABS based on the requirements in the following:

Container carriers [$L \geq 130$ m (427 ft)]: Section 5C-5-4 of the *ABS Rules for Building and Classing Marine Vessels*

Liquefied gas carriers with membrane tanks: Section 5C-12-4 of the *ABS Rules for Building and Classing Marine Vessels*

Liquefied gas carriers with independent tanks: Section 5 of the *ABS Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks*

Tankers [$L \geq 150$ m (492 ft)] to which the Common Structural Rules are not applicable: Section 5C-1-4 of the *ABS Rules for Building and Classing Marine Vessels*

Bulk carriers [$L \geq 150$ m (492 ft)] to which the Common Structural Rules are not applicable: Section 5C-3-4 of the *ABS Rules for Building and Classing Marine Vessels*

The **SHR** notation is optional for vehicle carriers ($L > 130$ m). This notation may be awarded provided the scantlings within $0.4L$ amidships have been reviewed to the *ABS Guide for Alternative Requirements for Hull Construction of Vessels Intended to Carry Vehicles (130 Meters or More in Length)*.

REFERENCES

1A-1-4/7.5 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for the vessel types listed above classed based on plans approved to the Rules of another recognized classification society, in accordance with 1A-1-4/7.5. It is optional for vehicle carriers ($L > 130$ m).

Example – ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, **SHR**...

Common Notations and Symbols

NOTATION

SH-DLA

DESCRIPTION

SafeHull-Dynamic Loading Approach (SH-DLA) – This notation is assigned to vessels which have been evaluated using an enhanced structural analysis procedure and criteria for calculating and evaluating the behavior of hull structures under dynamic loading conditions and built in accordance with plans approved on the basis of the results of such analysis, in addition to full compliance with the other requirements of the Rules.

REFERENCES

1A-1-3/19 of the *Rules for Conditions of Classification (Part 1A)*

Subsection 1/7 of the *Guide for 'SafeHull Dynamic Loading Approach' for Vessels*

REMARKS

This notation is optional. However, this is mandatory for container carriers with length over 290 m. and ore and ore/oil carriers with length over 300 m.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, SH, SHCM, **SH-DLA**...

Common Notations and Symbols

NOTATION

SKP

SKP(a,b,c,d,e,f)

DESCRIPTION

SKP – This notation is supplemental information about the station keeping performance for specified limiting environmental conditions, such as wind speed and direction, wave height and frequency, current speed and direction. In general, the limiting environments are to be applied to intact (all thrusters running) and damaged (worst case failure) conditions unless the limiting environmental conditions for post failure cases are also specified. The directions for wind, wave and current can be different and are to be specified by the Owner.

SKP(a,b,c,d,e,f) – This notation is supplemental information about the station keeping performance for a given environmental location. The analysis is to be carried out for many combinations of wind speeds, wave height and current speeds. The wind speed and wave height relationship is to be provided for the specified location. A co-linear condition for wind, wave and current is assumed.

- a** The probability that the vessel can remain on station at the selected site **f** and current speed of **e** with all thrusters in normal operation conditions
- b** The probability that the vessel can remain on station with the failure of minimum effect single thruster at the selected site **f** and current speed of **e**
- c** The probability that the vessel can remain on station with the failure of maximum effect single thruster at the selected site **f** and current speed of **e**
- d** The probability that the vessel can remain on station at the selected site **f** and current speed of **e** with the worst case failure condition
- e** Current speed in knot (Owner-specified or typically 1.5 kt)
- f** Environment location (Owner-specified or a representative typically North Sea location)

REFERENCES

Subsections 1/3 and 9/1 of the ABS *Guide for Dynamic Positioning Systems*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, ✘ DPS-2 **SKP**...

✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, ✘ DPS-2 **SKP(95, 95, 85, 75, 2 North Sea)**...

Common Notations and Symbols

NOTATION

SLAM-B

SLAM-S

DESCRIPTION

These notations are assigned to vessels complying with the requirements specified in the *ABS Guide for Slamming Loads and Strength Assessment for Vessels*.

SLAM-B (Strengthened against Bottom and/or Bowflare slamming) – This notation is assigned to a vessel which satisfies the ABS bottom slamming and/or bowflare slamming procedure and criteria in the bow area, depending on vessel type and hull form.

SLAM-S (Strengthened against Stern slamming) – This notation is assigned to a vessel which satisfies the ABS stern slamming procedure and criteria in the stern area.

REFERENCES

Subsection 1/9 of the *Guide for Slamming Loads and Strength Assessment for Vessels*

REMARKS

This notation is optional. However, this Guide is mandatory for container carriers with length over 350 m.

Example – ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, SH, SHCM, **SLAM-B**...
☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, SH, SHCM, **SLAM-S**...

Common Notations and Symbols

NOTATION

SMART (INF)

SMART (MHM)

SMART (SHM)

DESCRIPTION

SMART (INF) – This notation is assigned to vessels possessing a permanently installed Smart Function system for Data **INF**rastructure for Smart Function implementation, in compliance with the *ABS Guide for Smart Functions for Marine Vessels and Offshore Units*.

SMART (MHM) – This notation is assigned to vessels possessing a permanently installed Smart Function system for **M**achinery **H**ealth **M**onitoring, in compliance with the *ABS Guide for Smart Functions for Marine Vessels and Offshore Units*.

SMART (SHM) – This notation is assigned to vessels possessing a permanently installed Smart Function system for **S**tructural **H**ealth **M**onitoring, in compliance with the *ABS Guide for Smart Functions for Marine Vessels and Offshore Units*.

The notation can be any of the single notations or a combination.

REFERENCES

Subsection 1/6 of the *Guide for Smart Functions for Marine Vessels and Offshore Units*

REMARKS

These notations are optional.

- Example –
- ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **SMART (INF)**...
 - ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **SMART (MHM)**...
 - ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **SMART (SHM)**...
 - ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **SMART (INF, MHM)**...

Common Notations and Symbols

NOTATION

SO_x Scrubber Ready

DESCRIPTION

This notation is assigned to vessels complying with Level 3 of the “SO_x Scrubber Ready” scheme in the *ABS Guide for SO_x Scrubber Ready Vessels*, which incorporates both the Class Approval of the detailed drawings and the installation of specified equipment onboard the vessel. The following descriptive letters will be included in the vessel record when the item of equipment or system indicated has been ABS approved/surveyed as per the applicable Rule/Guide requirements and installed on board to the attending Surveyor’s satisfaction:

- i) Hull structural arrangement and reinforcement – Descriptive HS
- ii) SO_x Scrubber system configuration and vessel integration – Descriptive SC
- iii) Exhaust gas system – Descriptive EG
- iv) Washwater system – Descriptive W
- v) Chemical treatment system, if applicable – Descriptive C
- vi) Residue system – Descriptive R

REFERENCES

Subsection 1/5 of the *Guide for SO_x Scrubber Ready Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **SO_x Scrubber Ready HS SC EG**, NBL, SH, SHCM...

Common Notations and Symbols

NOTATION

SPMA

DESCRIPTION

This notation is assigned a vessel provided with mooring arrangements in accordance with the requirements of Section 3-5-2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

3-5-2/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, **SPMA**, Ⓢ, ✘ AMS ...

✘ A1, Liquefied Gas Carrier, **SPMA**, Ⓢ, ✘ AMS ...

Common Notations and Symbols

NOTATION

SSV

DESCRIPTION

This notation is assigned to ABS classed vessels, offshore installations or facilities, with standalone or integrated computer-based control systems complying with the procedures and criteria of the *Guide for Software Systems Verification – ABS CyberSafety™ Volume 4*. The **SSV** Notation applies only to the software of the equipment's control system that are included in the ABS reviewed Verification Plan. The connected control systems and functions of the connected equipment are not included in the notation unless detailed in the verification plan.

REFERENCES

Subsection 1/3 of the *Guide for Software Systems Verification – ABS CyberSafety™ Volume 4*

Subsection 11/5 of the *ABS Guide for Dynamic Positioning Systems*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **SSV**...

✘ A1, Column Stabilized Drilling Unit, (P), ✘ AMS, **SSV**...

Common Notations and Symbols

NOTATION

SUSTAIN-1

SUSTAIN-2

DESCRIPTION

SUSTAIN-1 – This notation is assigned to marine and offshore assets that comply with the relevant requirements contained in Section 2 of the *ABS Guide for Sustainability Notations*.

SUSTAIN-2 – This notation is assigned to marine and offshore assets that comply with the relevant requirements contained in both Section 2 and Section 3 of the *ABS Guide for Sustainability Notations*.

The year 2020 in the notation indicates the applicable edition of the Guide.

REFERENCES

Subsection 1/5 of the *Guide for Sustainability Notations*

REMARKS

These notations are optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **SUSTAIN-1...**

✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **SUSTAIN-2...**

✘ A1, Column Stabilized Drilling Unit, Ⓢ, ✘ AMS, **SUSTAIN-1...**

✘ A1, Column Stabilized Drilling Unit, Ⓢ, ✘ AMS, **SUSTAIN-2...**

Common Notations and Symbols

NOTATION

TCM

DESCRIPTION

Tailshaft Condition Monitoring (TCM) – This notation is assigned to vessels with tailshafts specifically arranged with oil-lubricated stern tube bearings, complying with the requirements of 4-3-2/13 of the ABS *Rules for Building and Classing Marine Vessels*.

REFERENCES

4-3-2/13.1 of the *Rules for Building and Classing Marine Vessels*

4-3-2/13.1 of the *Guide for Building and Classing International Naval Ships*

4-3-2/13.1 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

7-9-20/1 of the *Rules for Survey After Construction*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **TCM**, ESP ...

Common Notations and Symbols

NOTATION

TCM-PS

DESCRIPTION

Tailshaft Condition Monitoring – Protective Seal (TCM-PS) – This notation is assigned to vessels with the tailshaft stern tube seal system which can fully eliminate oil discharge through the oil to sea interface. The system would eliminate the need for using environmentally acceptable lubricants (EALs) as required by some local and regional regulations., complying with the requirements of 4-3-2/14 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

4-3-2/14.1 of the *Rules for Building and Classing Marine Vessels*

4-3-2/14.1 of the *Guide for Building and Classing International Naval Ships*

4-3-2/14.1 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

7-9-20/5 of the *Rules for Survey After Construction*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, CSR, AB-CM, **TCM-PS**, ESP ...

Common Notations and Symbols

NOTATION

TCM-W

DESCRIPTION

Tailshaft Condition Monitoring – Water Lubricated (**TCM-W**) – This notation is assigned to vessels with tailshafts specifically arranged with closed or opened type water-lubricated stern tube bearings, complying with the requirements of 4-3-2/15 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

4-3-2/15.1 of the *Rules for Building and Classing Marine Vessels*

4-3-2/15.1 of the *Guide for Building and Classing International Naval Ships*

4-3-2/15.1 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

7-9-20/3 of the *Rules for Survey After Construction*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **TCM-W**, ESP ...

Common Notations and Symbols

NOTATION

UWILD

DESCRIPTION

UnderWater Inspection in Lieu of Drydocking (UWILD) – This notation signifies that the vessel is in compliance with Appendix 7-A1-1 of the *ABS Rules for Survey After Construction (Part 7)* and the Owner may request Underwater Inspection as an alternative to Drydocking Inspection. This notation is not applicable to vessels 15 years of age or over and subject to the Enhanced Survey Program (ESP).

REFERENCES

Appendix 7-A1-1 of the *Rules for Survey After Construction (Part 7)*

REMARKS

This notation is optional.

Example – ☒ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), ⓔ, ☒ AMS,
☒ ACCU, CSR, AB-CM, ESP, **UWILD**...

Common Notations and Symbols

NOTATION

UWN (Q)

UWN+ (Q)

UWN (T)

UWN+ (T)

UWN (R)

DESCRIPTION

UWN (Q) – This notation is assigned to vessels, which comply with the minimum underwater noise criteria for the Quiet Operation condition for low speed operation in environmentally-sensitive areas, as specified in the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise*.

UWN+ (Q) – This notation is assigned to vessels, which comply with more stringent underwater noise criteria for the Quiet Operation condition for low speed operation in environmentally-sensitive areas, as specified in the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise*.

UWN (T) – This notation is assigned to vessels, which comply with the minimum underwater noise criteria for the Transit condition for normal operation, as specified in the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise*.

UWN+ (T) – This notation is assigned to vessels, which comply with more stringent underwater noise criteria for the Transit condition for normal operation, as specified in the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise*.

A commercial vessel may carry multiple underwater noise notations. The application of these notations to offshore exploration and production vessels is subject to case-by-case review by ABS with consideration of specific designs and operational conditions of these vessels.

For research vessels, there is only one notation applicable, **UWN (R)**.

UWN (R) – This notation is assigned to research vessels, which comply with the minimum underwater noise criteria specified in the *ABS Guide for the Classification Notation Underwater Noise and External Airborne Noise*.

REFERENCES

Subsection 1/3 of the *Guide for the Classification Notation Underwater Noise and External Airborne Noise*

REMARKS

These notations are optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **UWN (Q)**...
✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **UWN+ (Q)**...
✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **UWN (T)**...
✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, CSR, AB-CM, **UWN+ (T)**...
✘ A1, Seismographic Research Vessel, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **UWN (R)**...

Common Notations and Symbols

NOTATION

VIB-M

DESCRIPTION

This notation is assigned to vessels that comply with the vibration acceptance criteria as specified in the ABS *Guide for Vibration of Machinery Equipment and Related Structures*.

Compliance with is to be verified to the satisfaction of the attending Surveyor through the measurement of the vibration of:

- i)* Local structures
 - Structures supporting the main propulsion system or other machinery and equipment, as well as nearby structures
 - Structures in compartments of machinery and equipment that may be affected by the operation of the associated machinery and equipment
- ii)* Machinery and equipment specified in this Guide

REFERENCES

Subsection 1/2 of the *Guide for Vibration of Machinery Equipment and Related Structures*

REMARKS

This notation is optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **VIB-M**...

Common Notations and Symbols

NOTATION

Wind-Assisted

Wind-Assisted+

Wind-Assisted Ready

DESCRIPTION

Wind-Assisted – This notation is assigned to a vessel with a wind assisted propulsion system installed on board, which complies with the minimum class requirements included in the *ABS Requirements for Wind Assisted Propulsion System Installation*

Wind-Assisted+ – This notation is assigned to a vessel with a wind assisted propulsion system installed on board that, in addition to compliance with the minimum class requirements included in the *ABS Requirements for Wind Assisted Propulsion System Installation*, also complies with and has been certified according to the additional requirements included in the *ABS Requirements for Wind Assisted Propulsion System Installation*.

Wind-Assisted Ready – This notation is assigned to a vessel with an anticipated wind assisted propulsion system to be installed in the future, which complies with the requirements in the *ABS Requirements for Wind Assisted Propulsion System Installation*.

REFERENCES

Subsection 1/2 of the *Requirements for Wind Assisted Propulsion System Installation*

REMARKS

These notations are optional. However, vessels fitted with wind assisted propulsion systems are subject to minimum class requirements outlined in the Requirements document.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **Wind-Assisted...**

☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **Wind-Assisted+...**

☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, CSR, AB-CM, **Wind-Assisted Ready...**

Common Notations and Symbols

NOTATION

Wind-SC

DESCRIPTION

This notation is to be assigned to an offshore support vessel that complies with Sections 2/3, 2/5, 2/6, 3/3, 4/3, 9, and 10 of the *ABS Requirements for Building and Classing Wind Farm Support Vessels*.

This notation is also applicable to Steel Vessels, Aluminum Vessels, or Offshore Support Vessels that comply with Sections 2/3, 2/5, 2/6, 3/3, 9, and 10 of the *ABS Requirements for Building and Classing Wind Farm Support Vessels*.

REFERENCES

1/5.1 of the *Requirements for Building and Classing Wind Farm Support Vessels*

REMARKS

This notation is mandatory.

Example – ✘ A1, Offshore Support Vessel (Heavy Lift), **Wind-SC**, Ⓢ, ✘ AMS...

Common Structural Rules for Bulk Carriers and Oil Tankers

NOTATION

CSR, AB-CM

DESCRIPTION

Vessels designed and built to the requirements in Part 5A “General Hull Requirements (IACS CSR Part 1)”, and 5B “Ship Types (IACS CSR Part 2)”, and 5C-A1-2 “Guide for ABS Construction Monitoring Program” of the *Rules for Building and Classing Marine Vessels*, except as stipulated in 1A-1-4/7.6 of the *Rules for Conditions of Classification (Part 1A)*, will be identified in the *Record* by the notation **CSR, AB-CM**.

REFERENCES

1A-1-3/23 of the *Rules for Conditions of Classification (Part 1A)*

Part 5A & 5B “Common Structural Rules for Bulk Carriers and Oil Tankers” of the *Rules for Building and Classing Marine Vessels*

Appendix 5C-A2, “ABS Construction Monitoring Program” of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

These notations are mandatory.

Example – ✘ A1, Oil Carrier, ⓔ, ✘ AMS, ✘ ACCU, **CSR, AB-CM**...

✘ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), ⓔ, ✘ AMS,
✘ ACCU, **CSR, AB-CM**...

Anchor Handling Vessels

NOTATION

Anchor Handling Vessel

DESCRIPTION

This notation is assigned to vessels other than OSVs designed primarily for anchor handling service and built to the requirements of Part 5C, Chapter 22 of the ABS *Rules for Building and Classing Marine Vessels* and other relevant sections of the Rules.

REFERENCES

5C-22-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Anchor Handling Vessel**, ⊕, ✘ AMS, ✘ ACCU...

Aquaculture Installations and Vessels

NOTATION

ASV-Support

ASV-Fish Pellet

ASV-Live Fish

DESCRIPTION

ASV-Support – This notation is assigned to fish farm support vessels, which comply with the requirements of Sections 1 to 5 and 6/1, 6/6, and Section 8 of the ABS *Requirements for Building and Classing Aquaculture Service Vessels*. Fish farm Support vessels are engaged primarily in aquaculture installation support capable of inspection, maintenance and repair of aquaculture installations, fish delousing, fish pellet carriage, and/or harvesting fish.

ASV-Fish Pellet – This notation is assigned to fish pellet carriers, which comply with the requirements of Sections 1 to 5 & 6/1, 6/2 if applicable, 6/6, and Section 8 of the ABS *Requirements for Building and Classing Aquaculture Service Vessels*. Fish pellet carriers are vessels with cargo holds for storing and transporting fish pellets from onshore facilities to fish farming installations.

ASV-Live Fish – This notation is assigned to live fish carriers, which comply with the requirements of Sections 1 to 6 and Section 8 of the ABS *Requirements for Building and Classing Aquaculture Service Vessels*. Live fish carriers are vessels with systems and tanks for loading, unloading, storing and carrying live fish.

REFERENCES

1/2.2.1 of the *Requirements for Building and Classing Aquaculture Service Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory for vessels primarily engaged in aquaculture operations.

Example – ✘ A1, **ASV-Support**, ☉, ✘ AMS, ✘ ACCU...

✘ A1, **ASV-Fish Pellet**, ☉, ✘ AMS, ✘ ACCU...

✘ A1, **ASV-Live Fish**, ☉, ✘ AMS, ✘ ACCU...

Aquaculture Installations and Vessels

NOTATION

Fish Farm Installation, Manned (*hull type*)

Fish Farm Installation, Unmanned (*hull type*)

DESCRIPTION

These notations are assigned to non-self-propelled, sited aquaculture installations that comply with the requirements for the hull structure of the aquaculture installation, the mooring system or foundation, and onboard machinery, equipment and systems that are not part of the aquaculture systems, as defined in the *ABS Requirements for Building and Classing Aquaculture Installations*

The service notation will be appended by one of the following: **Spar-Type**, **Column-Stabilized Type**, **Ship-Shape** or **Non-Buoyant** to indicate the hull type. The hull structural configurations of these installations are described in 1/8.1 of the *ABS Requirements for Building and Classing Aquaculture Installations*.

REFERENCES

1/2.2 and 1/8.1 of the *Requirements for Building and Classing Aquaculture Installations*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – **⊗ A1, Fish Farm Installation, Manned (Spar-Type) (S) Mississippi Canyon Block 779...**

⊗ A1, Fish Farm Installation, Manned (Column-Stabilized Type) (S) Mississippi Canyon Block 779...

⊗ A1, Fish Farm Installation, Manned (Ship-Shape) (S) Mississippi Canyon Block 779...

⊗ A1, Fish Farm Installation, Unmanned (Non-Buoyant) (S) Mississippi Canyon Block 779...

Asphalt Carriers

NOTATION

Asphalt Carrier with Independent Tanks (*temp*°C)

DESCRIPTION

This notation is assigned to vessels designed for carriage of asphalt solutions with maximum design cargo temperature of *temp*°C in independent tanks (during loading, steady state, etc.), and built to the requirements of the *ABS Requirements for Building and Classing Asphalt Carriers with Independent Tanks* and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1/1.1 of the *Requirements for Building and Classing Asphalt Carriers with Independent Tanks*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Asphalt Carrier with Independent Tanks (170°C)**, Ⓢ, ✘ AMS, ✘ ACCU...

Bulk Carriers

NOTATION

Bulk Carrier

DESCRIPTION

A **Bulk Carrier** is a vessel that is constructed generally with single deck, topside tanks and hopper side tanks in cargo spaces, and is intended primarily to carry dry cargo in bulk. It includes vessels of such type as Ore Carriers or combination carriers such as Ore or Oil Carriers and Oil or Bulk/Ore (OBO) Carriers. The ABS vessel type notation **Bulk Carrier** forms part of the class designation assigned to a vessel built in accordance with the requirements of Part 5A and Part 5B, Chapter 1 (for CSR bulk carriers) or Part 5C, Chapter 3 (for vessels 150 meters (492 feet) or more in Length) or Part 5C, Chapter 4 (for vessels under 150 meters (492 feet) in Length) of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5A-1-1/3.2, 5C-3-1/1.1, 5C-3-1/1.5.1 and 5C-4-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

See also bulk carrier notations, **BC-A, BC-B, BC-C, (no MP)**.

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, **Bulk Carrier**, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ☒ AMS,
☒ ACCU, SH, SHCM...

☒ A1, **Bulk Carrier**, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ☒ AMS,
☒ ACCU, CSR, AB-CM...

Bulk Carriers

NOTATION

Bulk Carrier, BC-A (holds X and Y may be empty with maximum cargo density: XX tonnes/m³)

Bulk Carrier, BC-B (maximum cargo density: XX tonnes/m³)

Bulk Carrier, BC-C (maximum cargo density: XX tonnes/m³)

(no MP)

DESCRIPTION

BC-A: Bulk Carriers designed to carry dry bulk cargoes of cargo density 1.0 tonnes/m³ (62.4 lbs/ft³) and above with specified holds empty in addition to **BC-B** conditions

BC-B: Bulk Carriers designed to carry dry bulk cargoes of cargo density 1.0 tonnes/m³ (62.4 lbs/ft³) and above with all cargo holds loaded in addition to **BC-C** conditions

BC-C: Bulk Carriers designed to carry dry bulk cargoes of cargo density less than 1.0 tonnes/m³ (62.4 lbs/ft³)

(maximum cargo density: XX tonnes/m³): A notation added after the above Bulk Carrier **BC-A**, **BC-B** and **BC-C** notations where a bulk carrier has not been designed to carry 3.0 tonnes/m³ (187 lbs/ft³) or higher density cargoes

(no MP): A notation added after the above Bulk Carrier **BC-A**, **BC-B** and **BC-C** notations where a bulk carrier has not been designed for loading and unloading in multiple ports

REFERENCES

5A-1-1/3.2.1 and 5C-3-1/1.1 of the *Rules for Building and Classing Marine Vessels*.

REMARKS

Assignment of these notations requires Class Committee approval.

Assignment of the appropriate service feature notation is mandatory for Bulk Carriers over 150 m in length.

Example – ☒ A1, Bulk Carrier, **BC-A (holds 2, 4, 6 and 8 may be empty with maximum cargo density: 2.50 tonnes/m³)**, (E), ☒ AMS, ☒ ACCU, SH, SHCM...

☒ A1, Bulk Carrier, **BC-B (maximum cargo density: 1.7 tonnes/m³)**, (no MP), (E),
☒ AMS, ☒ ACCU, SH, SHCM...

☒ A1, Bulk Carrier, **BC-B (maximum cargo density: 1.7 tonnes/m³)**, (no MP), (E),
☒ AMS, ☒ ACCU, CSR, AB-CM...

Bulk Carriers

NOTATION

Box-Shaped Bulk Carrier

DESCRIPTION

A **Box-Shaped Bulk Carrier** is a vessel having double side skin construction without upper wing tanks and lower wing tanks or with small topside tanks throughout the entire length and height of cargo holds and which are designed for the carriage of various dry cargoes including bulk cargoes. The ABS vessel type notation **Box-Shaped Bulk Carrier** is assigned to a vessel built in accordance with the requirements of Part 5C, Chapter 19 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-19-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

See also bulk carrier notations, **BC-A, BC-B, BC-C**.

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Box-Shaped Bulk Carrier**, Ⓢ, ✕ AMS, ✕ ACCU, SH, SHCM...

Bulk Carriers

NOTATION

Oil or Bulk/Ore (OBO) Carrier

DESCRIPTION

An **Oil or Bulk/Ore (OBO) Carrier** is a single deck vessel of double skin construction, with a double bottom, lower and upper wing tanks, (hopper and topside tanks) intended for carriage of oil or dry cargoes including ore in bulk. The ABS vessel type notation **Oil or Bulk/Ore (OBO) Carrier** is assigned to a vessel built in accordance with the requirements of Part 5C, Chapters 1 and 3 or Chapters 2 and 4 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-3-1/1.1 and 5C-3-1/1.5.4 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Oil or Bulk/Ore (OBO) Carrier**, Ⓢ, ✕ AMS, ✕ ACCU, SH, SHCM...

Bulk Carriers

NOTATION

Ore Carrier

DESCRIPTION

An **Ore Carrier** is a vessel having two longitudinal bulkheads and a double bottom throughout the cargo area, constructed for the carriage of ore cargoes in the center holds only. The ABS vessel type notation **Ore Carrier** is assigned to a vessel built in accordance with the requirements of Part 5C, Chapter 3 (for vessels 150 meters (492 feet) or more in Length) or Part 5C, Chapter 4 (for vessels under 150 meters (492 feet) in Length) of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-3-1/1.1, 5C-3-1/1.5.2 and 5C-4-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Ore Carrier**, Ⓢ, ✘ AMS, ✘ ACCU, SH, SHCM...

Bulk Carriers

NOTATION

Ore or Oil Carrier

DESCRIPTION

An **Ore or Oil Carrier** is a vessel having two longitudinal bulkheads and a double bottom throughout the cargo area, constructed for the carriage of ore cargoes in the center holds or for the carriage of oil cargoes in the center holds and wing tanks. The ABS vessel type notation **Ore or Oil Carrier** is assigned to a vessel built in accordance with the requirements of Part 5C, Chapters 1 and 3 or Chapters 2 and 4 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-3-1/1.1 and 5C-3-1/1.5.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Ore or Oil Carrier**, Ⓢ, ✕ AMS, ✕ ACCU, SH, SHCM...

Bulk Carriers

NOTATION

Great Lakes Service

DESCRIPTION

This is a geographical limitation notation for vessels built specifically for trading on the Great Lakes and the St. Lawrence Seaway. This notation is assigned to Great Lakes vessels of bulk carrier type, having machinery aft, at least one complete deck, a double bottom and side tanks, a longitudinal system of framing for the deck and bottom, and two continuous longitudinal bulkheads fitted between the freeboard deck and the bottom shell.

REFERENCES

1A-8-2/1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for vessels built to the *ABS Rules for Building and Classing Bulk Carriers for Service on the Great Lakes*.



Example – ✕ A1, **Great Lakes Service**, ⊕, ✕ AMS, ✕ ACCU...

Bulk Carriers

NOTATION

DWA

DESCRIPTION


Deep Water Anchoring (DWA) – Bulk carriers having length of 150 meters or more designed, constructed and surveyed in full compliance with the criteria contained within the *ABS Guide for the Optional Class Notation Deep Water Anchoring for Oil Tankers and Bulk Carriers (DWA)* may be assigned a class notation **DWA**, Deep Water Anchoring for Ships, in addition to the usual  symbol, thus **✘ A1  DWA**. The notation signifies that the anchor, chain, windlass and support structure of the vessel is in compliance with the requirements contained in the Guide addressing deep water anchoring.

REFERENCES

1/1.1 of the *Guide for the Optional Class Notation Deep Water Anchoring for Oil Tankers and Bulk Carriers (DWA)*.

REMARKS

This notation is optional.

Example – **✘ A1**, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), ** DWA**, **✘ AMS**, **✘ ACCU**, CSR, AB-CM...

Bulk Carriers

NOTATION

LDCARE1 (ore loading/unloading rate xx MT/hour, yy minutes overshooting)

LDCARE2 (ore loading/unloading rate xx MT/hour, yy minutes overshooting)

TML

DESCRIPTION

LDCARE1 – This notation is assigned to vessels \ carrying ore cargoes that comply with the requirements in Subsection 2/1 of the *Guide for Special Loading of Ore and Ore/Oil Carriers*.

LDCARE2 – This notation is assigned to vessels carrying ore cargoes that comply with the requirements in Subsection 2/3 of the *Guide for Special Loading of Ore and Ore/Oil Carriers* which are fitted with automatic draft reading sensors, as well as an automatic level-gauging system for all ballast tanks linked to the onboard loading program.

TML – This notation is assigned to vessels carrying iron ore fines that comply with the requirements in Section 3 of the *Guide for Special Loading of Ore and Ore/Oil Carriers* and 5C-3-A3 of the *Marine Vessel Rules*.

REFERENCES

Subsection 1/5 of the *Guide for Special Loading of Ore and Ore/Oil Carriers*

5C-3-A3/9.1 & 5C-3-A3/9.21 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of the **TML** notation requires Class Committee approval.

These notations are optional.

Example – ✘ A1, Ore or Oil Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **LDCARE1** (ore loading/unloading rate xx MT/hour, yy minutes overshooting)...

✘ A1, Ore Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **LDCARE2** (ore loading/unloading rate xx MT/hour, yy minutes overshooting)...

✘ A1, Ore Carrier, (E), ✘ AMS, ✘ ACCU, SH, SHCM, **TML**...

Bulk Carriers

NOTATION

PMA

PMA+

DESCRIPTION

PMA – This notation is assigned to Bulk Carriers of 20,000 gross tonnage and over constructed on or after 1 January 2006 to signify that the vessel’s means of access meets IMO Resolutions MSC.151(78) – “Adoption of Amendments to the International Convention for the Safety Of Life At Sea, 1974, as Amended” and MSC.158(78) – “Adoption of Amendments to the Technical Provisions for Means of Access for Inspections”, and the associated IACS Unified Interpretation (UI) SC 191 for the application of amended SOLAS regulation II-1/3-6 (resolution MSC.151 (78)) and revised Technical provisions for means of access for inspections (resolution MSC.158 (78)).

PMA+ – This notation is assigned to Bulk Carriers of 20,000 gross tonnage and over constructed on or after 1 January 2006 to signify that the vessel’s means of access meets the requirements for the **PMA** notation, plus additional ergonomic considerations, such as sizes of openings, clear overhead heights, guardrail heights and stanchion spacing, ladder incline angles, etc.

REFERENCES

Subsection 1/5 of the *Guide for Means of Access to Tanks and Holds for Inspection*

REMARKS

These notations are optional. However, SOLAS requires permanent means of access for certain Oil Tankers and Bulk Carriers.

Example – ☒ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ☒ AMS,
☒ ACCU, CSR, AB-CM, **PMA**...

☒ A1, Bulk Carrier, BC-B (maximum cargo density: 1.7 tonnes/m³), Ⓢ, ☒ AMS,
☒ ACCU, CSR, AB-CM, **PMA+**...

Chemical Carriers

NOTATION

Chemical Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed or adapted and specifically fitted for the carriage in bulk of any liquid product listed in Part 5C, Chapter 9, Section 17 of the *ABS Rules for Building and Classing Marine Vessels*. The ABS vessel type notation **Chemical Carrier** forms part of the classification designation assigned to vessels built in accordance with the requirements of Part 5C, Chapter 9 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-9-1/1.1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Chemical Carrier**, Ⓢ, ✘ AMS, ✘ ACCU...

Chemical Carriers

NOTATION

BLU

DESCRIPTION

This notation is assigned to a vessel that is provided with bow loading and unloading arrangements in compliance with the ABS *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*.

REFERENCES

Subsection 1/3 of the *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*

REMARKS

This notation is optional. However, minimum class requirements for vessels with bow loading and unloading arrangements are contained in the *Marine Vessel Rules*.

Example – ✕ A1, Chemical Carrier, **BLU**, Ⓢ, ✕ AMS, ✕ ACCU...

Chemical Carriers

NOTATION

ECTC(C)

ECTC(SC)

DESCRIPTION

ECTC(C) – This notation is assigned to vessels with cargo tanks that comply with Subsection 2/1 and cargo tank cleaning systems that comply with 5C-1-7/35.3.2 of the *ABS Rules for Building and Classing Marine Vessels*.

ECTC(SC) – This notation is assigned to vessels with slop tanks that also comply with the requirements of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-1-7/1.1.2 of the *Rules for Building and Classing Marine Vessels*

REMARKS

These notations are optional.

Example – ☒ A1, Chemical Carrier, Ⓢ, ☒ AMS, **ECTC(C)**, ☒ ACCU...

☒ A1, Chemical Carrier, Ⓢ, ☒ AMS, **ECTC(SC)**, ☒ ACCU...

Chemical Carriers

NOTATION

SLU

DESCRIPTION

This notation is assigned to a vessel that is provided with stern loading and unloading arrangements in compliance with the ABS *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*.

REFERENCES

Subsection 1/3 of the *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*

REMARKS

This notation is optional. However, minimum class requirements for vessels with stern loading and unloading arrangements are contained in the *Marine Vessel Rules*

Example – ✕ A1, Chemical Carrier, **SLU**, ⊕, ✕ AMS, ✕ ACCU ...

Compressed Natural Gas Carriers

NOTATION

Compressed Natural Gas Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed for the transportation in bulk of compressed natural gas in accordance with the ABS *Guide for Vessels Intended to Carry Compressed Natural Gases in Bulk*. The ABS vessel type notation **Compressed Natural Gas Carrier** forms part of the classification designation assigned to vessels built in accordance with the ABS *Guide for Vessels Intended to Carry Compressed Natural Gases in Bulk*.

REFERENCES

1-3/1 of the *Guide for Vessels Intended to Carry Compressed Natural Gases in Bulk*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Compressed Natural Gas Carrier**, Ⓢ, ✕ AMS...

Container Carriers

NOTATION

Container Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed primarily for the carriage of containers in holds or on deck or both, with structures for that purpose, such as cell guides, pedestals, etc. The ABS vessel type notation **Container Carrier** forms part of the classification designation assigned to vessels built in accordance with the requirements of Part 5C, Chapter 5 (for vessels 130 meters (427 feet) to 450 meters (1476 feet) in Length) or Part 5C, Chapter 6 (for vessels under 130 meters (427 feet) in Length) of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-5-1/1.1 and 5C-6-1/1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Container Carrier**, Ⓢ, ✕ AMS, ✕ ACCU, SH, SHCM...

Container Carriers

NOTATION

CSC

DESCRIPTION

Container Securing Certificate (**CSC**) – The **CSC** notation signifies that the initial installation of the container securing system has been certified by ABS for unrestricted service. A certificate indicating that the initial installation is in compliance with the ABS *Guide for Certification of Container Securing Systems* may be issued upon satisfactory completion of plan review, testing of securing devices, approval of the Container Securing Manual and installation of the fixed securing devices to the satisfaction of the attending Surveyor.

REFERENCES

Subsection 2/1 of the *Guide for Certification of Container Securing Systems*

REMARKS

This notation is optional.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, **CSC**, SH, SHCM...

Container Carriers

NOTATION

CLP

CLP-V

CLP-V(PARR)

DESCRIPTION

CLP (Computer Lashing Program) – This notation signifies that an onboard computer lashing program installed on a vessel assigned the **CSC** notation has been certified in accordance with Appendix 4 of the *ABS Guide for Certification of Container Securing Systems*.

CLP-V (Computer Lashing Program – Specific Voyage) – This notation signifies that an onboard computer lashing program installed on a vessel assigned the **CSC** notation has been certified in accordance with Appendix 4 of the *ABS Guide for Certification of Container Securing Systems* and that its capability to address both unrestricted service and specific voyage routes has been certified. **CLP-V** is mandatory for vessels that receive the optional **CSC** notation and apply voyage specific reductions.

CLP-V(PARR) (Computer Lashing Program – Route Splitting and Parametric Roll Detection) – This notation signifies that an onboard computer lashing program installed on a vessel assigned the **CSC** notation has been certified in accordance with Appendix 4 of the *ABS Guide for Certification of Container Securing Systems* and that its capability to address both unrestricted service and specific voyage routes has been certified. **CLP-V** is mandatory for vessels that receive the optional **CSC** notation and apply voyage specific reductions.

CSC is a prerequisite for **CLP**, **CLP-V**, and **CLP-V(PARR)**.

REFERENCES

Subsection 2/1 of the *Guide for Certification of Container Securing Systems*

REMARKS

The **CLP** and **CLP-V** notations are optional. The **CLP-V(PARR)** notation is mandatory for vessels that apply the Route Splitting Reduction Factors.

Example – ☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, CSC, **CLP**, SH, SHCM...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, CSC, **CLP-V**, SH, SHCM...

☒ A1, Container Carrier, (E), ☒ AMS, ☒ ACCU, CSC, **CLP-V(PARR)**, SH, SHCM...

Container Carriers

NOTATION

EBCAD

DESCRIPTION

Enhanced Brittle Crack Arrest Design (EBCAD) – The **EBCAD** notation signifies that a container carrier has been built to the satisfaction of ABS with a combination of two or more of the additional crack prevention/crack arrest measures specified in 1/5.1 of the *Guide for Application of Higher-Strength Hull Structural Thick Steel Plates in Container Carriers* along the cargo hold region and with NDT inspection in accordance with Subsection 5/3 of the Guide.

REFERENCES

1/5.1 of the *Guide for Application of Higher-Strength Hull Structural Thick Steel Plates in Container Carriers*

REMARKS

This notation is optional.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, **EBCAD**, SH, SHCM...

Container Carriers

NOTATION

ERGO(LASH)

ERGO(LASH)-R

DESCRIPTION

ERGO(LASH) – This notation is applicable to both existing and new container carriers prescribing enhanced ergonomic requirements relating to container lashing based on the design guidelines contained in section 6 (Design) and section 8 (Specialized Container Safety Design), except subsection 6.3 (Lashing Systems), of Annex 14 of the Code of Safe Practice for Cargo Stowage and Securing (CSS Code) as adopted by MSC.1/Circ.1352 and in compliance with Section 2 of the *ABS Guide for Ergonomic Container Lashing*.

ERGO(LASH)-R – This notation is applicable to existing container carriers, prescribing requirements based on good ergonomic practice, relating to container lashing in compliance with Section 2 of the *ABS Guide for Ergonomic Container Lashing*. It is considered that it will be more practicable to apply this notation's requirements to existing container carriers with the understanding that existing ships are not required to be enlarged or undergo other major structural modifications.

REFERENCES

Subsection 1/4 of the *Guide for Ergonomic Container Lashing*

REMARKS

These notations are optional.

Example – ☒ A1, Container Carrier, Ⓜ, ☒ AMS, ☒ ACCU, CSC, **ERGO(LASH)**, SH, SHCM...

☒ A1, Container Carrier, Ⓜ, ☒ AMS, ☒ ACCU, CSC, **ERGO(LASH)-R**, SH, SHCM...

Container Carriers

NOTATION

FOC

FOC-R

FOC+

FOC-R+

CCH

FBC

CHF

DESCRIPTION

These notations are assigned to a container carrier complying with the requirements specified in the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*.

FOC (Fire-fighting **O**n-deck Container) – This notation is assigned to a Container Carrier provided with an arrangement of a fire piping system and additional fire-fighting equipment in compliance with Section 2 of the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*. This notation recognizes enhanced container deck firefighting capability onboard Container Carriers beyond that required by SOLAS Chapter II-2 Regulation 10 requirements [as amended by IMO Resolution MSC 365(93)].

FOC-R (Fire-fighting **O**n-deck Container – **R**estricted) – This notation is assigned to a Container Carrier when full compliance with the **FOC** notation requirements is not practical that is provided with fire-fighting equipment and arrangements in compliance with Section 3 of the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*. It is applicable to container carriers constructed either before 1 January 2016 (designed to carry any number of container tiers on deck) or those constructed after 1 January 2016 (designed to carry 4 or less tiers of containers on deck), but do provide on deck firefighting arrangements that exceed the SOLAS requirements applicable to those vessels

FOC+ (Fire-fighting **O**n-deck Container Plus) – This notation is assigned to a Container Carrier meeting the **FOC** notation requirements of Section 2 and the enhanced requirements for hatch cover protection and fire-fighter’s breathing apparatus of Section 4 of the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*.

FOC-R+ (Fire-fighting **O**n-deck Container – **R**estricted Plus) – This notation is assigned to a Container Carrier meeting the **FOC-R** notation requirements of Section 3 and the enhanced requirements for hatch cover protection and fire-fighter’s breathing apparatus of Section 4 of the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*.

CCH (Container Carrier **H**ouse/Structures) – This notation is assigned to a Container Carrier provided with specific cooling arrangements, air monitoring, and other arrangements intended to protect crew within the accommodations, services spaces, machinery spaces and other normally manned locations from the heat as well as smoke that may be created during a cargo fire, in compliance with Section 5 of the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*.

FBC (Fire-fighting **B**elow-deck Container) – This notation is assigned to a Container Carrier provided with enhanced fire detection, extinguishing and cooling arrangements within a container hold beyond that required by SOLAS Chapter II-2 Regulations, in compliance with Section 6 of the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*.

CHF (Container Hold Flooding) – This notation is assigned to a Container Carrier provided with appropriate arrangements and established procedures to flood a container hold to support extinguishing a fire in the hold, in compliance with Section 7 of the *ABS Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*.

REFERENCES

Subsection 1/3 of the *Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers*

REMARKS

These notations are optional.

Example – ✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **FOC**, SH, SHCM ...
✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **FOC-R**, SH, SHCM ...
✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **CCH**, SH, SHCM ...
✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **FBC**, SH, SHCM ...
✘ A1, Container Carrier, (E), ✘ AMS, ✘ ACCU, **CHF**, SH, SHCM ...

Container Carriers

NOTATION

PARR-C1

PARR-C2

DESCRIPTION

These notations are assigned to a vessel complying with the requirements specified in the *ABS Guide for Assessment of Parametric Roll Resonance in the Design of Container Carriers*.

PARR-C1 – This notation is assigned to a vessel with parametric roll under control. For this notation, a roll decay test, susceptibility and severity check and numerical simulations have been performed and operational guidance has been developed.

PARR-C2 – This notation is assigned to a vessel with parametric roll under control. For this notation, a roll decay test, susceptibility and severity check and numerical simulations have been performed and operational guidance has been developed. In addition, anti-rolling devices designed specifically to eliminate or mitigate parametric roll with proof of efficiency or general-purpose anti-rolling devices proven effective against parametric roll are fitted.

REFERENCES

Section 5 of the *Guide for the Assessment of Parametric Roll Resonance in the Design of Container Carriers*

REMARKS

These notations are optional.

Example – \boxtimes A1, Container Carrier, \textcircled{E} , \boxtimes AMS, \boxtimes ACCU, SH, SHCM, **PARR-C1**...

Container Carriers

NOTATION

SPR

DESCRIPTION

The **SPR** notation may be granted if the springing analysis procedure as indicated in the *ABS Guidance Notes on Springing Assessment for Container Carriers and Ore Carriers* is satisfied and the following criteria are complied with:

- i) Fatigue Strength in accordance with Appendix 1 of the *ABS Guide for Application of Higher-Strength Hull Structural Thick Steel Plates in Container Carriers*

REFERENCES

1/5.3 of the *Guide for Application of Higher-Strength Hull Structural Thick Steel Plates in Container Carriers*

5C-5-1/1.3.5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory for container carriers with length in excess of 350 meters (1148 feet), or with the upper deck region constructed of H47 grade steel, and optional for all container carriers.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, **SPR**, SH, SHCM...

Container Carriers

NOTATION

WIP

DESCRIPTION

The **WIP** notation may be granted if the whipping analysis procedure as indicated in the ABS *Guidance Notes on Whipping Assessment for Container Carriers* is satisfied and the following criteria are complied with:

- i) Hull Girder Ultimate Strength as indicated in Appendix 5C-5-A4a of the *Marine Vessel Rules*; and
- ii) Fatigue Strength in accordance with Appendix 1 of the ABS *Guide for Application of Higher-Strength Hull Structural Thick Steel Plates in Container Carriers*

REFERENCES

1/5.3 of the *Guide for Application of Higher-Strength Hull Structural Thick Steel Plates in Container Carriers*

5C-5-1/1.3.5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory for container carriers with length in excess of 350 meters (1148 feet), or with the upper deck region constructed of H47 grade steel, and optional for all container carriers.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ ACCU, **WIP**, SH, SHCM...

Crane Vessels

NOTATION

Crane Vessel

DESCRIPTION

This notation is assigned to vessels whose main function is crane operations of heavy lift cranes with a lifting capacity of 160 metric tons (352800 lbf) and above and built to the requirements of Part 5C, Chapter 21 of the *ABS Rules for Building and Classing Marine Vessels* and other relevant sections of the Rules. It excludes offshore support crane vessels that are intended for the lifting of heavy loads in oil drilling and production operations, offshore construction and/or salvage operations, with a lifting capacity of 160 metric tons (352800 lbf) and above.

Vessels assigned the **Crane Vessel** notation are to have their cranes certified as required in 5C-21-2/7. The **CRC** notation is to be maintained throughout the vessel's service life.

REFERENCES

5C-21-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Crane Vessel**, Ⓢ, ✘ AMS, ✘ ACCU, CRC...

General Dry Cargo Vessels

NOTATION

General Dry Cargo Vessel

DESCRIPTION

This notation is assigned to vessels intended for the carriage of diverse forms of dry cargoes in compatible combinations and packaging, such as boxes, bales, barrels, drums, etc., and built to the requirements of Part 5C, Chapter 20 of the *ABS Rules for Building and Classing Marine Vessels* and other relevant sections of the Rules. It may also be assigned to deck cargo ships designed to carry cargo exclusively above deck without cargo holds below deck.

REFERENCES

5C-20-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **General Dry Cargo Vessel**, (E), ✕ AMS, ✕ ACCU, ESDC...

Liquefied Gas Carriers

NOTATION

Liquefied Gas Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed for the transportation in bulk of liquefied gas or other products listed in Part 5C, Chapter 8, Section 19 of the *ABS Rules for Building and Classing Marine Vessels*, or Chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (i.e., the International Gas Carrier Code) or Chapter XIX of the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (i.e., the Gas Carrier Code). The ABS vessel type notation **Liquefied Gas Carrier** forms part of the classification designation assigned to vessels built in accordance with Part 5C, Chapter 8 or Chapter 12 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-8-1/1.1.1 and 5C-12-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Liquefied Gas Carrier**, ⊕, ✘ AMS...

Liquefied Gas Carriers

NOTATION

Liquefied Hydrogen Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and built to carry liquefied hydrogen in accordance with the *ABS Requirements for Liquefied Hydrogen Carriers* and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

Subsection 1/3 of the *Requirements for Liquefied Hydrogen Carriers*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – \boxtimes A1, **Liquefied Hydrogen Carrier**, $\text{\textcircled{E}}$, \boxtimes AMS...

Liquefied Gas Carriers

NOTATION

Liquefied Natural Gas Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed for the transportation in bulk of liquefied natural gas of which the methane content is more than 80%. The ABS vessel type notation **Liquefied Natural Gas Carrier** forms part of the classification designation assigned to vessels built in accordance with Part 5C, Chapter 8 or Chapter 12 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-8-1/1.1.1 and 5C-12-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Liquefied Natural Gas Carrier**, ⊕, ✕ AMS...

Liquefied Gas Carriers

NOTATION

Liquefied Gas Carrier with Independent Tanks

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed for the carriage of liquefied gases. The ABS vessel type notation **Liquefied Gas Carrier with Independent Tanks** forms part of the classification designation assigned to vessels built in accordance with the *ABS Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks*.

REFERENCES

1/1.1 of the *Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Liquefied Gas Carrier with Independent Tanks**, (E), ✘ AMS...

Liquefied Gas Carriers

NOTATION

Liquefied Carbon Dioxide Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed for the carriage of liquefied carbon dioxide and built to the requirements of the ABS *Requirements for Liquefied Carbon Dioxide Carriers*.

Gas carriers approved to carry multiple cargoes are to be classed **✕ A1 Liquefied Gas Carrier** and are not eligible for the **✕ A1 Liquefied Carbon Dioxide Carrier** notation.

REFERENCES

Subsection 1/1 of the *Requirements for Liquefied Carbon Dioxide Carriers*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **✕ A1, Liquefied Carbon Dioxide Carrier, ⊕, ✕ AMS...**

Liquefied Gas Carriers

NOTATION

Liquefied Gas Carrier, Storage Service

Liquefied Natural Gas Carrier, Storage Service

Liquefied Gas Carrier with Independent Tanks, Storage Service

DESCRIPTION

The notation **Storage Service** is assigned to liquefied gas carriers built to the satisfaction of the ABS Surveyors to the additional requirements of the *ABS Guide for Liquefied Gas Carrier Storage Service*:

REFERENCES

Subsection 1/5 of the *Guide for Liquefied Gas Carrier Storage Service*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional.

Example – ✕ A1, Liquefied Gas Carrier, Storage Service, (E), ✕ AMS...

A1, Liquefied Gas Carrier, Storage Service, (E), AMS...

✕ A1, Liquefied Natural Gas Carrier, Storage Service, (E), ✕ AMS...

A1, Liquefied Natural Gas Carrier, Storage Service, (E), AMS...

✕ A1, Liquefied Gas Carrier with Independent Tanks, Storage Service, (E), ✕ AMS...

A1, Liquefied Gas Carrier with Independent Tanks, Storage Service, (E), AMS...

Liquefied Gas Carriers

NOTATION

BLU

DESCRIPTION

This notation is assigned to a vessel that is provided with bow loading and unloading arrangements in compliance with the ABS *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*.

REFERENCES

Subsection 1/3 of the *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*

REMARKS

This notation is optional. However, minimum class requirements for vessels with bow loading and unloading arrangements are contained in the *Marine Vessel Rules*

Example – ✕ A1, Liquefied Gas Carrier, **BLU**, ⓔ, ✕ AMS...

Liquefied Gas Carriers

NOTATION

DFD

DESCRIPTION

Dual Fuel Diesel Engine power plant (**DFD**) is a mandatory notation assigned to a vessel with a dual fuel diesel engine power plant designed, constructed, and tested in accordance with the applicable parts of 5C-8-16/7 and Appendix 5C-8-A7 of the *ABS Rules for Building and Classing Marine Vessels*, which has been constructed and installed under survey by the Surveyor.

Where a dual fuel diesel engine power plant is also designed, constructed and tested in association with 5C-8-16/9 of the *ABS Rules for Building and Classing Marine Vessels* for a fuel other than natural gas, the **DFD** notation will be assigned relative to the particular low flashpoint fuel or fuels (e.g., **DFD – Ethane**, **DFD-LPG**, **DFD – Methane**, **Ethane**).

REFERENCES

5C-8-1/1.1.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory for vessels fitted with a dual fuel engine power plant.

Example – ✘ A1, Liquefied Gas Carrier, Ⓢ, ✘ AMS, **DFD**, ✘ ACCU...

✘ A1, Liquefied Gas Carrier, Ⓢ, ✘ AMS, **DFD – Methane, Ethane**, ✘ ACCU...

Liquefied Gas Carriers

NOTATION

DFGT

DESCRIPTION

Dual Fuel Gas Turbine power plant (**DFGT**) is a mandatory notation assigned to a vessel with a dual fuel gas turbine power plant designed, constructed, and tested in accordance with the requirements of 5C-8-16/8 and Appendix 5C-8-A8 of the *ABS Rules for Building and Classing Marine Vessels*, which has been constructed and installed under survey by the Surveyor.

REFERENCES

5C-8-1/1.1.4 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory for vessels fitted with a dual fuel gas turbine power plant.

Example – ✘ A1, Liquefied Gas Carrier, Ⓢ, ✘ AMS, **DFGT**, ✘ ACCU...

Liquefied Gas Carriers

NOTATION

GCU

DESCRIPTION

Gas Combustion Unit (**GCU**) is an optional notation assigned upon the client's request to a vessel with a gas combustion unit designed, constructed, and tested in accordance with the requirements of 5C-8-7/4 and Appendix 5C-8-A6 of the *ABS Rules for Building and Classing Marine Vessels*, which has been constructed and installed under survey by the Surveyor. See also 5C-8-A6/Table 2-Column A of the *Marine Vessel Rules*.

REFERENCES

5C-8-1/2.3.2 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional. However, it is mandatory where the unit is used to comply with 5C-8-7/1/1.2 of the *ABS Rules for Building and Classing Marine Vessels*.

Example – ✕ A1, Liquefied Gas Carrier, ⊕, ✕ AMS, **GCU**, ✕ ACCU...

Liquefied Gas Carriers

NOTATION

LNG Bunkering

LNG Bunkering, VRS

DESCRIPTION

This notation is assigned to a liquefied gas carrier arranged for regular LNG bunkering service, designed, constructed, and tested in accordance with the requirements of the *ABS Guide for LNG Bunkering*.

Vapor Return System (VRS) - Where a vessel assigned the **LNG Bunkering** notation incorporates an optional Vapor Return System, the **VRS** notation may be assigned. The Vapor Return System is to be designed, constructed and tested in accordance with 2/5.5.2 of the *ABS Guide for LNG Bunkering*.

Where a vessel assigned the **LNG Bunkering** notation incorporates additional equipment such as a Re-Liquefaction Unit, Gas Combustion Unit or Dual Fuel Diesel Engine designed, constructed and tested in accordance with the applicable requirements of the applicable sections of Part 5C, Chapter 8 of the *ABS Rules for Building and Classing Marine Vessels*, the additional notations **RELIQ**, **GCU** or **DFD** may be assigned.

REFERENCES

Subsection 1/7 of the *Guide for LNG Bunkering*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional.

Example – ✘ A1, Liquefied Gas Carrier, **LNG Bunkering**, (E), ✘ AMS, ✘ ACCU...

✘ A1, Liquefied Gas Carrier, **LNG Bunkering, VRS**, (E), ✘ AMS, ✘ ACCU...

✘ A1, Liquefied Gas Carrier, **LNG Bunkering, RELIQ**, (E), ✘ AMS, ✘ ACCU...

Liquefied Gas Carriers

NOTATION

LNG Cargo Ready

DESCRIPTION

This notation is assigned to liquefied gas carriers falling under the scope of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) and the ABS requirements under Part 5C, Chapter 8 of the *ABS Rules for Building and Classing Marine Vessels (Marine Vessel Rules)* and having design features suitable for the carriage of LNG at a future date.

The following descriptive letters will supplement the **LNG Cargo Ready** notation as a *Record* comment when the component or system indicated has been ABS approved/surveyed as per the applicable Rule/Guide requirements and installed on board to the attending Surveyor’s satisfaction (with the exception of final LNG gas trials):

<i>System</i>	<i>Descriptive Letters</i>
Cargo Containment	CC
Cargo Piping	CP
Cargo Pump	PP
Cargo Gas Compressor	CO
Reliquefaction System	RS
Gas Combustion Unit	GC
Fuel Gas Supply	FG
Dual Fuel Engine	DF

The **LNG Cargo Ready** notation is to be applied in combination with either the **Liquefied Gas Carrier** or **Liquefied Gas Carrier with Independent Tanks** notations.

REFERENCES

Subsection 1/1 of the *Guide for LNG Cargo Ready Vessels*

REMARKS

This notation is optional.

Example – ❌ A1, Liquefied Gas Carrier, **LNG Cargo Ready**, ⓘ, ❌ AMS...

❌ A1, Liquefied Gas Carrier with Independent Tanks, **LNG Cargo Ready**, ⓘ, ❌ AMS...

Liquefied Gas Carriers

NOTATION

(LNG) R

DESCRIPTION

This notation is assigned to a new or existing **LNG** Carrier on which the Owner has elected to install a **Re**-gasification facility so that the vessel may load and transport LNG and then re-gasify it for direct discharge ashore.


REFERENCES

Subsection 1/3 of the *Guide for Building and Classing LNG Regasification Vessels*


2-1/3.17 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

This notation is optional.

Example – ✘ A1, Liquefied Gas Carrier, **(LNG) R**, , ✘ AMS, ✘ ACCU...

✘ A1, Liquefied Gas Tank Barge, **(LNG) R**...

✘ A1, Liquefied Gas Carrier with Independent Tanks, **(LNG) R**, , ✘ AMS,
✘ ACCU...

Liquefied Gas Carriers

NOTATION

RELIQ

DESCRIPTION

Re-Liquefaction System (RELIQ) is an optional notation assigned upon the client’s request to a vessel with a re-liquefaction system designed, constructed, and tested in accordance with the requirements of 5C-8-7/3 and Appendix 5C-8-A5 of the *ABS Rule for Building and Classing Marine Vessels*, which has been constructed and installed under survey by the Surveyor. See also 5C-8-A5/Table 2-Column A of the *Marine Vessel Rules*.

The **RELIQ** notation may be granted to gas carriers other than LNGC, such as LPGC, provided all applicable requirements in Appendix 5C-8-A5 of the *ABS Rules for Building and Classing Marine Vessels* are met by interpreting the term “LNG” as the specific liquefied cargo of the vessel.

REFERENCES

5C-8-1/2.3.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional. However, it is mandatory where the system is used to comply with 5C-8-7/1.1.1 or 5C-8-7/1.1.4 of the *ABS Rules for Building and Classing Marine Vessels*.

Example – ✘ A1, Liquefied Gas Carrier, Ⓢ, ✘ AMS, **RELIQ**, ✘ ACCU...

Liquefied Gas Carriers

NOTATION

SLU

DESCRIPTION

This notation is assigned to a vessel that is provided with stern loading and unloading arrangements in compliance with the ABS *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*.

REFERENCES

Subsection 1/3 of the *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*

REMARKS

This notation is optional. However, minimum class requirements for vessels with stern loading and unloading arrangements are contained in the *Marine Vessel Rules*.

Example – ✘ A1, Liquefied Gas Carrier, **SLU**, Ⓢ, ✘ AMS ...

Oil Carriers

NOTATION

Fuel Oil Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed for the transportation of petroleum products in bulk, having flash points exceeding 60°C (140°F), closed cup test. Petroleum product refers to oil other than crude oil. The ABS vessel type notation **Fuel Oil Carrier** forms part of the classification designation assigned to vessels built in accordance with the requirements of Part 5C, Chapter 1 (for vessels 150 meters (492 feet) or more in Length) or Part 5C, Chapter 2 (for vessels under 150 meters (492 feet) in length) of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-1-1/1.1 and 5C-2-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Fuel Oil Carrier**, ⊕, ✘ AMS...

Oil Carriers

NOTATION

Oil Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed primarily for the transportation of petroleum products (crude oil) in bulk, having flash points at or below 60°C (140°F), closed cup test, and includes vessels of similar types such as combination carriers (Ore/Oil Carriers, etc.). The ABS vessel type notation **Oil Carrier** forms part of the classification designation assigned to vessels built in accordance with the requirements of Part 5A and Part 5B Chapter 2 (for CSR oil carriers) or Part 5C, Chapter 1 (for vessels 150 meters (492 feet) or more in Length) or Part 5C, Chapter 2 (for vessels under 150 meters (492 feet) in length) of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-1-1/1.1 and 5C-2-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Oil Carrier**, ⊕, ✘ AMS, SH, SHCM...

✘ A1, **Oil Carrier**, ⊕, ✘ AMS, CSR, AB-CM...

Oil Carriers

NOTATION

Oil Carrier, Storage Service

DESCRIPTION

This notation is assigned to a vessel that is classed **Oil Carrier** and operating in oil storage service in accordance with the requirements of Part 7, Appendix, 1 of the *ABS Rules for Building and Classing Floating Production Installations*.

REFERENCES

7-A1/3.3 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

This notation is optional.

Example – ✕ A1, **Oil Carrier, Storage Service**, ⊕, ✕ AMS...
A1, **Oil Carrier, Storage Service**, ⊕, AMS...

Oil Carriers

NOTATION

Oil Storage Service

DESCRIPTION

This notation is assigned to a vessel that has reached its MARPOL phase-out date and will be used in oil storage service in accordance with the requirements of Part 7, Appendix, 1 of the *ABS Rules for Building and Classing Floating Production Installations*.

REFERENCES

7-A1/3.3 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

This notation is optional.

Example – **✕ A1, Oil Storage Service, ⊕, ✕ AMS...**

A1, Oil Storage Service, ⊕, AMS...

Oil Carriers

NOTATION

ABS-ISGOTT

DESCRIPTION

This notation is assigned to Oil Carriers which are provided with the supplementary equipment and arrangements specified in the ABS *Guide for Implementation of International Safety Guide for Oil Tankers (ISGOTT)*. The requirements and notation identified in this Guide are optional for classification.

REFERENCES

Subsection 1/5 of the *Guide for Implementation of International Safety Guide for Oil Tankers (ISGOTT)*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, (E), ✘ AMS, ✘ ACCU, **ABS-ISGOTT...**

Oil Carriers

NOTATION

BLU

DESCRIPTION

This notation is assigned to a vessel that is provided with bow loading and unloading arrangements in compliance with the ABS *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*.

REFERENCES

Subsection 1/3 of the *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*

REMARKS

This notation is optional. However, minimum class requirements for vessels with bow loading and unloading arrangements are contained in the *Marine Vessel Rules*.

Example – ✘ A1, Oil Carrier, **BLU**, ⊕, ✘ AMS...

Oil Carriers

NOTATION

CPP

DESCRIPTION

Cargo Piping Protected (**CPP**) – At the request of the Owner, the notation **CPP** is assigned to an oil carrier in which all the cargo piping and valve control piping is located above the double bottom. The **CPP** notation is not a condition of classification.

REFERENCES

5C-1-7/1.1.2 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.



Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, ✘ ACCU, **CPP**...

Oil Carriers

NOTATION

DWA

DESCRIPTION

Deep Water Anchoring (DWA) – Oil carriers having length of 150 meters or more designed, constructed and surveyed in full compliance with the criteria contained within the *ABS Guide for the Optional Class Notation Deep Water Anchoring for Oil Tankers and Bulk Carriers (DWA)* may be assigned a class notation **DWA**, Deep Water Anchoring for Ships, in addition to the usual  symbol, thus **✘ A1  DWA**. The notation signifies that the anchor, chain, windlass and support structure of the vessel is in compliance with the requirements contained in the Guide addressing deep water anchoring.

REFERENCES

1/1.1 of the *Guide for the Optional Class Notation Deep Water Anchoring for Oil Tankers and Bulk Carriers (DWA)*.

REMARKS

This notation is optional.

Example – **✘ A1**, Oil Carrier,  **DWA**, **✘ AMS**, **✘ ACCU**, CSR, AB-CM...

Oil Carriers

NOTATION

ECTC(C)

ECTC(SC)

DESCRIPTION

ECTC(C) – This notation is assigned to vessels with cargo tanks that comply with Subsection 2/1 and cargo tank cleaning systems that comply with Subsection 2/3 of the *Guide for Enhanced Cargo Tank Cleaning*.

ECTC(SC) – This notation is assigned to vessels with slop tanks that also comply with the requirements of the *Guide for Enhanced Cargo Tank Cleaning*.

REFERENCES

1/7.1 of the *Guide for Enhanced Cargo Tank Cleaning*

REMARKS

This notation is optional.

Example – ☒ A1, Chemical Carrier, Ⓢ, ☒ AMS, **ECTC(C)**, ☒ ACCU...

☒ A1, Chemical Carrier, Ⓢ, ☒ AMS, **ECTC(SC)**, ☒ ACCU...

Oil Carriers

NOTATION

IGS – Ballast

DESCRIPTION

This notation is assigned to a vessel that is provided with an inert gas installation, supplying inert gas to ballast tanks, which complies with the requirements specified in 5C-1-7/25.43 of the *ABS Rules for Building and Classing Marine Vessels* and which has been constructed and installed under survey by the Surveyor.

REFERENCES

5C-1-7/25.43.1(b) of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Oil Carrier, Ⓢ, ✘ AMS, IGS – Ballast...

Oil Carriers

NOTATION

PMA

PMA+

DESCRIPTION

PMA – This notation is assigned to Oil Carriers of 500 gross tonnage and over constructed on or after 1 January 2006 to signify that the vessel’s means of access meets IMO Resolutions MSC.151(78) – “Adoption of Amendments to the International Convention for the Safety Of Life At Sea, 1974” and MSC.158(78) – “Adoption of Amendments to the Technical Provisions for Means of Access for Inspections”, and the associated IACS Unified Interpretation (UI) SC 191 for the application of amended SOLAS regulation II-1/3-6 (resolution MSC.151 (78)) and revised Technical provisions for means of access for inspections (resolution MSC.158 (78)).

This notation may also be assigned to oil tankers originally constructed on or after 1 January 2006 being converted to ship-type floating production installations in accordance with 5A-3-1/5.19.3 of the *ABS Rules for Building and Classing Floating Production Installations*.

PMA+ – This notation is assigned to Oil Carriers of 500 gross tonnage and over constructed on or after 1 January 2006 to signify that the vessel’s means of access meets the requirements for the **PMA** notation, plus additional ergonomic considerations, such as sizes of openings, clear overhead heights, guardrail heights and stanchion spacing, ladder incline angles, etc.

REFERENCES

Subsection 1/4 of the *Guide for Means of Access to Tanks and Holds for Inspection*

5A-3-1/5.19.3 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

These notations are optional. However, SOLAS requires permanent means of access for certain Oil Tankers and Bulk Carriers.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, CSR, AB-CM, **PMA**...

☒ A1, Oil Carrier, Ⓢ, ☒ AMS, CSR, AB-CM, **PMA+**...

☒ A1, Floating Production, Storage and Offloading System (Ship-Type), ☒ AMS, **PMA**

...

Oil Carriers

NOTATION

SLU

DESCRIPTION

This notation is assigned to a vessel that is provided with stern loading and unloading arrangements in compliance with the ABS *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*.

REFERENCES

Subsection 1/3 of the *Requirements for the Class Notation for Bow or Stern Loading and Unloading (BLU or SLU) for Oil Carriers, Liquefied Gas Carriers or Chemical Carriers*

REMARKS

This notation is optional. However, minimum class requirements for vessels with stern loading and unloading arrangements are contained in the *Marine Vessel Rules*.

Example – ✘ A1, Oil Carrier, **SLU**, ⓔ, ✘ AMS ...

Oil Carriers

NOTATION

SPMA

DESCRIPTION

This notation is assigned a vessel provided with mooring arrangements in accordance with the requirements of Section 3-5-2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

3-5-2/3 of the *Rules for Building and Classing Marine Vessels*.

REMARKS

This notation is optional.

Example – ✕ A1, Oil Carrier, **SPMA**, ⊕, ✕ AMS ...

Oil Carriers

NOTATION

VEC

VEC-L

DESCRIPTION

Vapor Emission Control (VEC) – The notation **VEC** is assigned to indicate that an oil carrier is fitted with a vapor emission control system; and that the system is in accordance with the applicable requirements of 5C-1-7/21 of the *ABS Rules for Building and Classing Marine Vessels* for this notation.

Vapor Emission Control-Lighting (VEC-L) – The notation **VEC-L** is assigned to indicate that an oil carrier is fitted with a vapor emission control system that is also suitable for use during lightering operations; and that the system is in accordance with the applicable requirements of 5C-1-7/21 of the *ABS Rules for Building and Classing Marine Vessels* for this notation.

REFERENCES

5C-1-7/1.1.2 and 5C-1-7/21.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

The **VEC** notation is mandatory when a cargo vapor emission control system is installed.

The **VEC-L** notation is optional.

Example – ☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **VEC**...

☒ A1, Oil Carrier, Ⓢ, ☒ AMS, ☒ ACCU, **VEC-L**...

Passenger Vessels

NOTATION

Passenger Vessel

DESCRIPTION

This notation is assigned to vessels designed and constructed and specifically fitted for the carriage of more than twelve (12) passengers. The ABS vessel type notation **Passenger Vessel** forms part of the classification designation assigned to vessels built in accordance with the requirements of Part 5C, Chapter 7 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-7-1/1.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✘ A1, **Passenger Vessel**, Ⓢ, ✘ AMS...

Passenger Vessels

NOTATION

COMF

COMF+

DESCRIPTION

COMF is a notation assigned to a vessel complying with the minimum criteria for the ambient environmental aspects (i.e., whole-body vibration, noise, indoor climate, and lighting). This notation is assigned to passenger vessels built in accordance with the requirements of the *ABS Guide for Passenger Comfort on Ships*.

COMF+ is a notation assigned to a vessel complying with the ambient environmental aspects (i.e., whole-body vibration, noise, indoor climate, and lighting) and additional criteria with respect to whole-body vibration (including motion sickness). This notation is assigned to passenger vessels built in accordance with the requirements of the *ABS Guide for Passenger Comfort on Ships*.

REFERENCES

Subsection 1/6 of the *Guide for Passenger Comfort on Ships*

REMARKS

These notations are optional.

Example – ☒ A1, Passenger Vessel, Ⓢ, ☒ AMS, ☒ ACCU, **COMF**...

☒ A1, Passenger Vessel, Ⓢ, ☒ AMS, ☒ ACCU, **COMF+**...

Passenger Vessels

NOTATION

SRtP

DESCRIPTION

Safe Return to Port (SRtP) – This notation is assigned to passenger ships of 120 m in length or more or having three or more main vertical zones complying with the provisions of SOLAS Ch II-1/Regulation 8-1 and SOLAS Ch II-2/Regulations 21 and 22, as interpreted by IMO MSC.1/Circ.1369 & 1369/Add.1 and IMO MSC.1/Circ.1437 in accordance with the requirements of 5C-7-5/25 of the ABS *Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-7-5/25.1.14 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for passenger vessel as described above.

Example – ✘ A1, Passenger Vessel, Ⓢ, ✘ AMS, ✘ ACCU, **SRtP**...

Refrigerated Cargo Carriers

NOTATION

⊠ IRCC

DESCRIPTION

The Integral Refrigerated Container Carrier notation **IRCC** indicates that a vessel is arranged for the carriage of refrigerated containers of plug-in or integral types which have their own individually mounted refrigeration machinery, hence requiring shipboard electrical power supply and in some cases the cooling water supply for the condensers and, where fitted, the associated temperature monitoring and control system and that such arrangements are in accordance with the applicable requirements of Part 6, Chapter 2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-2-1/7.1.4 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, ⊠ RCC, ⊕, ⊠ AMS, ⊠ IRCC...

Refrigerated Cargo Carriers

NOTATION

✕ IRCC-SP xxx/xx

DESCRIPTION

The Integral Refrigerated Container Carrier – Stowage Positions notation **IRCC-SP xxx/xx** is assigned to container ships equipped to transport integral refrigerated containers complying with the ABS *Guide for Carriage of Integral Refrigerated Containers on Board Ships*, in addition to the applicable requirements of the ABS *Rules for Building and Classing Marine Vessels*.

The Class Notation ✕ **IRCC-SP xxx/xx** is supplemented by two figures, the first of which stands for the number of certified integral refrigerated container stowage positions and the second figure for the percentage of containers that may be loaded with fruit or chilled cargoes.

REFERENCES

Subsection 1/1 of the *Guide for Carriage of Integral Refrigerated Containers on Board Ships*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, Container Carrier, (E), ✕ AMS, ✕ **IRCC-SP 940/35**...

Refrigerated Cargo Carriers

NOTATION

⊠ RC(Hold No.)

DESCRIPTION

The Refrigerated Cargo (Some Holds Only) notation **RC(Hold No.)** indicates that a vessel has some holds provided with facilities to carry refrigerated cargoes and that such arrangements are in accordance with the applicable requirements of Part 6, Chapter 2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-2-1/7.1.2 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, ⊕, ⊠ AMS, ⊠ RC(Hold Nos. 5 & 6)...

Refrigerated Cargo Carriers

NOTATION

⊠ RCC

⊠ RCCC

DESCRIPTION

The Refrigerated Cargo Carrier notation. **RCC** indicates that a vessel is arranged for the carriage of refrigerated cargoes in insulated holds and that such arrangements are in accordance with the applicable requirements of Part 6, Chapter 2 of the *ABS Rules for Building and Classing Marine Vessels*.

The Refrigerated Cargo Container Carrier notation **RCCC** indicates that a vessel is arranged for the carriage of refrigerated containers of the porthole type, individually cooled by shipboard refrigeration machinery and associated systems, and that such arrangements are in accordance with the applicable requirements of Part 6, Chapter 2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

RCC

6-2-1/7.1.1 of the *Rules for Building and Classing Marine Vessels*

RCCC

6-2-1/7.1.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional.

Example – ⊠ A1, ⊠ RCC, ⊕, ⊠ AMS ...

⊠ A1, ⊠ RCCC, ⊕, ⊠ AMS ...

Refrigerated Cargo Carriers

NOTATION

⊠ REBLT

DESCRIPTION

The **R**efrigerated **E**dible **B**ulk **L**iquid **T**anker notation **REBLT** indicates that a vessel is arranged for the carriage of edible liquid products in bulk in refrigerated cargo tanks cooled by shipboard refrigeration machinery and associated systems; and that such arrangements are in accordance with the applicable requirements of Part 6, Chapter 2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-2-1/7.1.5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, ⊠ REBLT, ⊕, ⊠ AMS ...

Refrigerated Cargo Carriers

NOTATION

☒ RFC

DESCRIPTION

The **R**efrigerated **F**ish **C**arrier notation **RFC** indicates that a fish processing or fish storage vessel is provided with facilities for chilling, cooling, or freezing and/or storage of fish in refrigerated cargo holds cooled by the vessel's own shipboard refrigeration machinery and associated systems and that such arrangements are in accordance with the applicable requirements of Part 6, Chapter 2 of the ABS *Rules for Building and Classing Marine Vessels*.

REFERENCES

6-2-1/7.1.6 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ☒ A1, ☒ AMS, ☒ ACCU, ☒ RFC...

Refrigerated Cargo Carriers

NOTATION

RMC

DESCRIPTION

The **R**efrigeration **M**achinery **C**ertified notation **RMC** indicates that an existing vessel is fitted with the arrangements necessary for the carriage of refrigerated cargoes which were not constructed and installed under ABS survey; but complies with Part 4, Section 12 of the *ABS Rules for Building and Classing Marine Vessels* (1997 edition).

REFERENCES

6-2-1/7.5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for existing vessels that change class to ABS as outlined above and in 6-2-1/7.5 of the *Marine Vessel Rules*.

Example – ✕ A1, (E), ✕ AMS, ✕ ACCU, **RMC**...

Refrigerated Cargo Carriers

NOTATION

☒ CA

DESCRIPTION

The Controlled Atmosphere notation **CA** indicates that a refrigerated cargo vessel is fitted with equipment and systems for supplying Nitrogen or equivalent gas to cargo holds, including associated safety features, in accordance with the applicable requirements of Part 6, Chapter 2 of the ABS *Rules for Building and Classing Marine Vessels*.

REFERENCES

6-2-1/9.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ☒ A1, ☒ AMS, ☒ CA (*date of survey*)...

Refrigerated Cargo Carriers

NOTATION

☒ CA (INST)

DESCRIPTION

The Controlled Atmosphere (**Installation**) notation **CA (INST)** indicates that a refrigerated cargo vessel is fitted with a permanently installed piping system which is ready for connection to portable controlled atmosphere generating equipment and that the arrangements and safety features are in accordance with the applicable requirements of Part 6, Chapter 2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-2-1/9.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ☒ A1, ☒ E, ☒ AMS, ☒ CA (INST)...

Refrigerated Cargo Carriers

NOTATION

(F)

DESCRIPTION

The Fruit Carrier notation **(F)** is assigned to refrigerated cargo or container vessels suitably designed for the carriage of fruit in hold spaces or containers when such arrangements are in accordance with the applicable requirements of Part 6, Chapter 2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

6-2-1/9.9 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, Ⓔ, ✕ AMS, **(F)**...

Semi-Submersible Heavy Lift Vessels

NOTATION

Semi-Submersible Heavy Lift Vessel

DESCRIPTION

This notation is assigned to a vessel designed and constructed for loading or unloading deck cargo by temporarily submerging the cargo deck by ballast operations in accordance with the requirements of the ABS *Requirements for Building and Classing Semi-Submersible Heavy Lift Vessels*.

REFERENCES

1/3.1 of the *Requirements for Building and Classing Semi-Submersible Heavy Lift Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ⚡ A1, **Semi-Submersible Heavy Lift Vessel**, Ⓜ, ⚡ AMS...

SWATH Vessels

NOTATION

SWATH Vessel

DESCRIPTION

Small Waterplane Area Twin Hull (**SWATH Vessel**) – This notation is assigned to SWATH vessels for commercial or noncommercial service operating in a speed regime where hull generated dynamic lift forces do not develop and are not considered as part of or a feature of the design that are built in accordance with the requirements of the ABS *Requirements for Building and Classing SWATH Vessels*, and which are approved by the Committee for unrestricted ocean service at the assigned freeboards.

It is applicable to SWATH vessels constructed of steel or aluminum and having V/\sqrt{L} less than 2.36 (1.30). High speed SWATH vessels having V/\sqrt{L} not less than 2.36 (1.30) will be specially considered.

REFERENCES

1-1/3 of the *Requirements for Building and Classing SWATH Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **SWATH Vessel**, ✕ AMS...

Vehicle Carriers

NOTATION

Vehicle Carrier

DESCRIPTION

This notation is assigned to a vessel designed and constructed to carry roll-on/roll-off cargoes, including vehicles, cargoes on pallets or in containers and loaded and unloaded by wheeled vehicles, on exposed or enclosed single deck or multiple exposed/enclosed decks, e.g. pure car carrier, roll-on/roll-off ship, trailer ship, etc. The ABS vessel type notation **Vehicle Carrier** forms part of the classification designation assigned to vessels built in accordance with the requirements of Section 5C-10-2 and other relevant sections of the ABS *Rules for Building and Classing Marine Vessels*.

The notation may also be assigned to vessels 130 meters or more in length intended to carry vehicles that meet the alternative requirements for hull construction in the ABS *Guide for Alternative Requirements for Hull Construction of Vessels Intended to Carry Vehicles (130 Meters or More in Length)*.

REFERENCES

5C-10-1/1.1.1 of the *Rules for Building and Classing Marine Vessels*

1/1.1 of the *Guide for Alternative Requirements for Hull Construction of Vessels Intended to Carry Vehicles (130 Meters or More in Length)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Vehicle Carrier**, (E), ✕ AMS...

Vehicle Carriers

NOTATION

Vehicle Passenger Ferry

DESCRIPTION

This notation is assigned to a vessel designed and constructed and fitted for the transportation of vehicles and more than twelve (12) passengers, including a ship carrying commercial vehicles and accompanying personnel. Also may be referred to as a ro-ro passenger ferry. The ABS vessel type notation **Vehicle Passenger Ferry** forms part of the classification designation assigned to vessels built in accordance with the requirements of Section 5C-10-3 and other relevant sections of the ABS *Rules for Building and Classing Marine Vessels* including the applicable safety requirements of Part 5C, Chapter 7.

REFERENCES

5C-7-1/1.1 and 5C-10-1/1.1.2 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Vehicle Passenger Ferry**, ⊕, ✕ AMS...

Vehicle Carriers

NOTATION

EFP-C(EV)

DESCRIPTION

EFP-C(EV) – This notation is assigned to vehicle carriers with Ro-Ro cargo spaces intended for the carriage of electric vehicles that comply with the requirements of 5C-10-4/7 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-10-4/7 of the *Rules for Building and Classing Marine Vessels*

1-1/5 of the *Guide for Enhanced Fire Protection Arrangements*

REMARKS

This notation is optional.

Example – ✕ A1, Vehicle Carrier, ⊕, ✕ AMS, ✕ ACCU, **EFP-C(EV)**...

Water Carriers

NOTATION

Water Carrier

DESCRIPTION

This notation is assigned to a vessel that is designed and constructed and specifically fitted for the carriage of water cargo in bulk in cargo tanks. The ABS vessel type notation **Water Carrier** forms part of the classification designation assigned to vessels built in accordance with the requirements of Part 5C, Chapter 11 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-11-1/2.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, **Water Carrier**, ⊕, ✕ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

(Operational Area) Domestic Service

DESCRIPTION

This notation is assigned to vessels built in accordance with Appendix 5C-A1-3 of the ABS *Rules for Building and Classing Marine Vessels* for restricted domestic service, with the restricted area being specified in the class designation.

REFERENCES

5C-A1-3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval unless it is being downgraded from unrestricted service.

This notation is mandatory for vessels built in accordance with Appendix 5C-A1-3 of the ABS *Rules for Building and Classing Marine Vessels*.

Example – ✘ A1, **U.S. Domestic Service**, ⊕, ✘ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

Ⓔ-(R)

DESCRIPTION

This notation may be assigned to the equipment of vessels under 90 meters (295 feet) in length, which have not been built under ABS survey, provided the existing anchors, chains and anchor windlass are confirmed certified by another recognized Classification Society.

REFERENCES

1A-1-3/11 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, Escort Vessel, Ⓔ-(R), ✕ AMS...

✕ A1, FFV2, Ⓔ-(R), ✕ AMS...

✕ A1, Towing Vessel (OSR-C2), Ⓔ-(R), ✕ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

Escort Vessel

Escort Vessel (dual purpose)

DESCRIPTION

Escort Vessel – A Classification notation assigned to vessels intended to provide assistance to disabled vessels in emergencies involving impaired maneuverability due to loss of propulsion or steering or both, complying with the requirements in Part 5D, Chapter 13 of the *ABS Rules for Building and Classing Marine Vessels*.

Escort Vessel (dual purpose) – A Classification notation assigned to vessels intended for escort operations and providing additional services, as explained in Section 5D-1-1 of the *ABS Rules for Building and Classing Marine Vessels*.

In such instances, the dual or multipurpose vessel is to be designed and built to these requirements, as well as to those applicable for the particular additional service or services.

REFERENCES

5C-16-1/3.1 and 5C-16-1/3.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory if they represent the primary intended service. There may be mandatory requirements associated with this service, even if the notation is not selected

Example – ✘ A1, **Escort Vessel**, (E), ✘ AMS...

✘ A1, **Escort Vessel (FFV2)**, (E), ✘ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

FFV1

FFV2

FFV3

DESCRIPTION

FFV1 – A Classification notation indicating that a vessel has the capability to fight external fires and is fitted with a water spray protection system for cooling the Fire Fighting Vessel’s surfaces to enable close operation for early stages of fire fighting and rescue operations; with capabilities in accordance with 5D-4-1/Table 1 of 1 of the *ABS Rules for Building and Classing Marine Vessels*.

FFV2 – A Classification notation indicating that a vessel is fitted with arrangements to continuously fight large fires and cooling structures on fire, with capabilities in accordance with of 5D-4-1/Table 1 of the *ABS Rules for Building and Classing Marine Vessels*.

FFV3 – A Classification notation indicating that a vessel is fitted with arrangements to continuously fight large fires and cooling structures on fire, with capabilities in accordance with of 5D-4-1/Table 1 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-14-1/3.1 and 5C-14-1/3.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory if they represent the primary intended service. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – ☒ A1, **FFV1**, ☉, ☒ AMS...

☒ A1, **FFV2**, ☉, ☒ AMS...

☒ A1, **FFV3**, ☉, ☒ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

FFV1 and 2

FFV1 and 3

DESCRIPTION

FFV1 and 2 – A Classification notation assigned to vessels with the notation **⊠ A1 FFV2** that also meet the requirements for **⊠ A1 FFV1**.

FFV1 and 3 – A Classification notation assigned to vessels with the notation **⊠ A1 FFV3** that also meet the requirements for **⊠ A1 FFV1**.

REFERENCES

5C-14-1/3.5 and 5C-14-1/3.7 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory if they represent the primary intended service. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **⊠ A1, FFV1 and 2, ⊕, ⊠ AMS...**

⊠ A1, FFV1 and 3, ⊕, ⊠ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

(FF Capable)

DESCRIPTION

A special classification designation given to vessels not in full compliance with the Rules or not specifically built for the service intended to be covered by the Rules, but which have some fire fighting capability in addition to their regular service, that are considered and reviewed under the intent of the Rules, in relation to the specific fire fighting requirements,

REFERENCES

5C-14-1/3.9 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, Towing Vessel (**FF Capable**), ⊕, ✘ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

Fishing Vessel

Side Trawl

Stern Trawl

Torremolinos Convention

DESCRIPTION

Fishing Vessel is a vessel designed and constructed to commercially catch, take or harvest fish or other living resources of the sea, including a fishing vessel that also processes its catch. A fishing vessel complying with the requirements of Part 5C, Chapter 18 of the *ABS Rules for Building and Classing Marine Vessels* will be given the classification notation of **Fishing Vessel**. In addition, an entry will also be made in the *Record* describing the vessel as either **Side Trawl** or **Stern Trawl**, as applicable.

The notation **Torremolinos Convention** is assigned to fishing vessels to indicate that the fishing vessel has been found to be in compliance with the provisions of the *International Conference on Safety of Fishing Vessels 1977/1993 Protocol*.

REFERENCES

5C-18-1/3 and 5C-18-1/9 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of the **Fishing Vessel**, **Side Trawl**, or **Stern Trawl** notation requires Class Committee approval.

The **Fishing Vessel** notation is mandatory. The other three notations are optional.

Example – ☒ A1, **Fishing Vessel – Side Trawl**, ☒ AMS... or

☒ A1, **Fishing Vessel – Stern Trawl**, ☒ AMS...

☒ A1, **Fishing Vessel – Torremolinos Convention**, ☒ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

OSR-S1

OSR-S2

DESCRIPTION

OSR-S1 – A Classification notation assigned to vessels built in compliance with Sections 5D-6-3 and 5D-6-4 of the *ABS Rules for Building and Classing Marine Vessels* and other relevant sections of the Rules for recovery of oil of unknown flash points and outfitted for the same, and approved for oil recovery service at the assigned freeboard.

OSR-S2 – A Classification notation assigned to vessels built in compliance with Section 5D-6-6 of the *ABS Rules for Building and Classing Marine Vessels* and other relevant sections of the Rules for recovery of oil having a flash point exceeding 60°C (140°F) and outfitted for the same, and approved for oil recovery service at the assigned freeboard.

REFERENCES

5C-15-1/3.1 and 5C-15-1/3.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory for vessels that carry out oil spill recovery operations.

Example – ☒ A1, **OSR-S1**, Ⓢ, ☒ AMS... or

☒ A1, **OSR-S2**, Ⓢ, ☒ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

(OSR-C1)

(OSR-C2)

DESCRIPTION

(OSR-C1) – A Classification notation assigned to vessels built in compliance with Section 5D-6-5 of the *ABS Rules for Building and Classing Marine Vessels* and other relevant sections of the Rules for recovery of oil of unknown flash points but not outfitted for the same, and approved for oil recovery service at the assigned freeboard.

(OSR-C2) – A Classification notation assigned to vessels built in compliance with Section 5D-6-7 of the *ABS Rules for Building and Classing Marine Vessels* and other relevant sections of the Rules for recovery of oil having a flash point exceeding 60°C (140°F) but not outfitted for the same, and approved for oil recovery service at the assigned freeboard.

REFERENCES

5C-15-1/3.5 and 5C-15-1/3.7 of the *Rules for Building and Classing Marine Vessels*

REMARKS

These notations are optional.

Example – ☒ A1, Towing Vessel **(OSR-C1)**, ⓔ, ☒ AMS... or

☒ A1, Towing Vessel **(OSR-C2)**, ⓔ, ☒ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

Towing Vessel

BP (xx)

QR

DESCRIPTION

Towing Vessel is a classification notation assigned to vessels designed primarily for towing service and built to the requirements of Part 5C, Chapter 17 of the *ABS Rules for Building and Classing Marine Vessels*. It is also the classification designation given to a tug that has the capability to separate from the barge of a tug-barge combination and shift to towing by hawser.

Bollard Pull (BP (xx)) – A notation assigned to a **Towing Vessel** indicating the static **Bollard Pull** determined by an approved bollard pull test in the presence of the Surveyor. The magnitude of the bollard pull obtained during the test will be included in the () in long tons.

Quick Release (QR) – A notation assigned to a **Towing Vessel** indicating that it has a remotely controlled **Quick Release** device for the towing hook or towing winch; and that the arrangements are in accordance with 5C-17-1/5.1 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5C-17-1/3, 5C-17-1/3.1.1 and 5C-17-1/9, and 5C-17-1/5.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of the **Towing Vessel** notation requires Class Committee approval.

The **Towing Vessel** notation or description appropriate for dual vessels is mandatory as outlined in 5C-17-1/3 of the *ABS Rules for Building and Classing Marine Vessels*.

The **BP (xx)** notation is mandatory.

The **QR** notation is mandatory.

Example – ✕ A1, **Towing Vessel**, ⊕, ✕ AMS, **QR**, **BP(xx)**...

Steel Vessels < 90 m (295 ft)

NOTATION

Towing Vessel ATB

DESCRIPTION

This notation is assigned to towing vessels intended for a tug-barge combination built in accordance with the requirements of the Part 5, Chapter 17 of the *Rules for Building and Classing Marine Vessels* wherein a tug is mated to a barge with a special connection system such that the tug is secured in the barge notch or on fenders by mechanical means, other than just wire ropes, chains, lines or other tackles.

The towing vessel is mated to the barge such that the towing vessel is capable of either pushing the barge in Tug-Barge integrated mode or towing the barge by hawser in a separate mode.

The tug and the barge are to be classed as two separate vessels but where applicable will be cross-referenced in the *Record*.

REFERENCES

5C-1-17/1 of the *Rules for Building and Classing Marine Vessels*

5-3-1/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Towing Vessel ATB...

Steel Vessels < 90 m (295 ft)

NOTATION

Towing Vessel ITB

DESCRIPTION

Integrated Tug Barge – This notation is assigned to towing vessels intended for a tug-barge combination built in accordance with the ABS *Rules for Building and Classing Steel Barges* wherein a tug is mated to a barge with a special connection system such that the tug is secured in the barge notch or on fenders by mechanical means, other than just wire ropes, chains, lines or other tackles.

The tug and the barge are to be classed as two separate vessels but where applicable will be cross-referenced in the *Record*.

REFERENCES

5C-1-17/1 of the *Rules for Building and Classing Marine Vessels*

5-3-1/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **(Gulf of Mexico) Towing Vessel ITB...**

Steel Vessels < 90 m (295 ft)

NOTATION

Towing Vessel Great Lakes Service, DM

Towing Vessel Great Lakes Service, PM

DESCRIPTION

Integrated Tug-Barge (ITB) – Towing Vessel – Dual Mode (Articulated Connection)

The tug will be classed and distinguished in the *Record* by the notation **Towing Vessel Great Lakes Service, DM**, which is in full compliance with the requirements of the Part 5C, Chapter 17 of the ABS *Rules for Building and Classing Marine Vessels*, and signifies that the vessel has the **Dual Mode (DM)** capabilities, pushing the barge in an Integrated Tug-Barge (ITB) mode and towing the barge by hawser in a separate mode.

Barge

The barge will be classed and distinguished in the *Record* by the symbols and notations in accordance with 1A-5-2/5 of the ABS *Rules for Conditions of Classification (Part 1A)* followed by the geographical/operational limitation, **Great Lakes Service, DM**.

Integrated Towing Vessel – Pushing Mode (Rigid Connection)

The tug will be classed and distinguished in the *Record* by the notation **Towing Vessel Great Lakes Service, PM**. This class notation will be assigned to a tug which does not meet the requirements for intact stability during tow as specified in Section 5C-17-2 of the ABS *Rules for Building and Classing Marine Vessels*, but does meet the requirements of the rest of the above Rules, and is intended to operate in a **Pushing Mode (PM)** only and remain fixed to the barge throughout the voyage under all weather conditions.

Barge

The barge will be classed and distinguished in the *Record* by the symbols and notations in accordance with 1A-5-2/5 of the ABS *Rules for Conditions of Classification (Part 1A)* followed by the geographical/operational limitation, **Great Lakes Service, PM**.

REFERENCES

DM

1.1.1 and 1.1.3 of the *Requirements for Building and Classing Integrated Tug-Barge (ITB) Combinations to Operate on the Great Lakes*

PM

1.1.2 and 1.1.3 of the *Requirements for Building and Classing Integrated Tug-Barge (ITB) Combinations to Operate on the Great Lakes*

REMARKS

Assignment of the **Towing Vessel Great Lakes Service** notation requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, **Towing Vessel Great Lakes Service, DM**, ⊕, ☒ AMS...

☒ A1, **Towing Vessel Great Lakes Service, PM**, ⊕, ☒ AMS...

Steel Vessels < 90 m (295 ft)

NOTATION

⊠ ABCU-H

DESCRIPTION

Automatic Bridge Centralized Control Unmanned – Harbor (**ABCU-H**) – This notation is assigned to a towing vessel of < 500 GT and a length of 20 m (65 ft) $\leq L \leq$ 46 m (150 ft) capable of operating with unmanned engine room limited to restricted operations in harbor, provided that the applicable requirements in Section 4-9-12 of the *Rules for Building and Classing Marine Vessels* are met.

REFERENCES

4-9-12/1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, Towing Vessel, ⊕, ⊠ AMS, ⊠ ABCU-H...

Steel Vessels < 90 m (295 ft)

NOTATION

HAB(WB)

HAB+(WB)

HAB++(WB)

DESCRIPTION

HAB(WB) – This notation is assigned to vessels (offshore support vessels, tug boats, tow boats, dredgers, research vessels, anchor handling vessels, or other vessels providing service to offshore oil and gas exploration and production), which comply with the minimum criteria for accommodation area design, whole-body vibration (separate criteria for accommodation areas and workspaces), noise, indoor climate, and lighting as included in the *ABS Guide for Crew Habitability on Workboats*.

HAB+(WB) – This notation is assigned to vessels (offshore support vessels, tug boats, tow boats, dredgers, research vessels, anchor handling vessels, or other vessels providing service to offshore oil and gas exploration and production) which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration and noise aimed at increasing crew comfort and safety as included in the *ABS Guide for Crew Habitability on Workboats*.

HAB++(WB) – This notation is assigned to vessels (offshore support vessels, tug boats, tow boats, dredgers, research vessels, anchor handling vessels, or other vessels providing service to offshore oil and gas exploration and production) which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration, noise, and indoor climate as included in the *ABS Guide for Crew Habitability on Workboats*.

REFERENCES

Subsection 1/6 of the *Guide for Crew Habitability on Workboats*

REMARKS

These notations are optional.

Example – ☒ A1, Towing Vessel, Ⓢ, ☒ AMS, **HAB(WB)**...

☒ A1, Offshore Support Vessel (Supply), Ⓢ, ☒ AMS, **HAB+(WB)**...

☒ A1, Offshore Support Vessel (DSV SAT), Ⓢ, ☒ AMS, **HAB++(WB)**...

Steel Vessels < 90 m (295 ft)

NOTATION

RB

DESCRIPTION

This notation is assigned to vessels less than 90 meters (295 feet) in length which have successfully undergone the necessary survey, analysis and repair to enable a vessel to continue actively working past its normal life (20-25 years) as required by the ABS *Guide for Rebuilding Vessels Less than 90 Meters (295 Feet) in Length and Barges of Any Length*.

REFERENCES

Subsection 1/1 of the *Guide for Rebuilding Vessels Less than 90 meters (295 feet) in Length and Barges of Any Length*

REMARKS

This notation is optional.

Example – ✘ A1, Towing Vessel ⊕, ✘ AMS, **RB**...

Offshore Support Vessels

NOTATION

Offshore Support Vessel

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel** will be assigned to vessels primarily designed for offshore support services and built to the applicable requirements in Part 3, Part 4, at least one specialized functional service of Part 5D, and other relevant sections of the ABS *Rules for Building and Classing Marine Vessels*. Vessels that have been designed, built and equipped for a specialized functional service will be assigned the appropriate notation.

REFERENCES

1A-3-2/1.1 of the *Rules for Conditions of Classification (Part 1A)*

5D-1-1/5.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **⊠ A1, Offshore Support Vessel (Supply), ⊕, ⊠ AMS...**

Offshore Support Vessels

NOTATION

Offshore Support Vessel (*Dual and Multi-Function Service*)

DESCRIPTION

Vessels intended for several functional services covered by the Rules may be assigned a combination of the class notations, provided that the specific requirements for each intended service are complied with and the vessels are equipped and prepared at all times to engage in operations related to the relevant functional services. (See 1A-3-2/1.3 of the *ABS Rules for Conditions of Classification (Part 1A)*).

REFERENCES

1A-3-2/1.3 and Part 5 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, **Offshore Support Vessel (SSR, GR A – (320), TOW)**, ⊕, ✕ AMS...
✕ A1, **Offshore Support Vessel (AH, Supply, TOW)**, ⊕, ✕ AMS...

Offshore Support Vessels

NOTATION

SPS

DESCRIPTION

The notation **SPS** may be assigned to vessels that comply with the requirements in Section 5D-1-2 of the *ABS Rules for Building and Classing Marine Vessels* and the IMO Code of Safety for Special Purpose Ships (SPS Code).

REFERENCES

1A-3-2/1.5 of the *Rules for Conditions of Classification (Part 1A)*

5D-1-2/1.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is optional.

Example – ⚡ A1, Offshore Support Vessel (Pipe Lay, **SPS**), Ⓢ, ⚡ AMS...

Offshore Support Vessels

NOTATION

(Operational Area) Domestic Service

DESCRIPTION

This notation is assigned to vessels built in accordance with Section 5D-1-3 of the *ABS Rules for Building and Classing Marine Vessel* for domestic service operations in offshore sites, with the restricted area being specified in the class designation.

REFERENCES

1A-3-2/1.7 of the *Rules for Conditions of Classification (Part 1A)*

5D-1-3/1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval unless it is being downgraded from unrestricted service.

This notation is mandatory for vessels built for domestic service and complying with alternative requirements accepted by the flag Administration.

Example – ✕, A1 Offshore Support Vessel (Supply) **US Domestic Service**, Ⓢ, ✕ AMS...

Offshore Support Vessels

NOTATION

Ⓔ-(R)

DESCRIPTION

This notation may be assigned to the equipment of offshore support vessels, which have not been built under ABS survey, provided the existing anchors, chains and anchor windlass are confirmed certified by another recognized Classification Society.

REFERENCES

1A-1-3/11 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✘ A1, Offshore Support Vessel, Ⓔ-(R), ✘ AMS...

✘ A1, Offshore Support Vessel (AH, Supply, TOW), Ⓔ-(R), ✘ AMS...

✘ A1, Offshore Support Vessel (Pipe Lay), Ⓔ-(R), ✘ AMS...

Offshore Support Vessels

NOTATION

HDC(*P*, *Locations*)

HLC(ρ , *Tanks*)

DESCRIPTION

The notation **HDC(*P*, *Locations*)** will be assigned to vessels designed with strengthening for carriage of heavy deck cargoes exceeding 25.66 kN/m² (2617 kgf/m², 536 lbf/ft²), and built to the requirements in 5D-1-4/3 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **HLC(ρ , *Tanks*)** will be assigned to vessels designed with strengthening for carriage of heavy liquid cargoes with specific gravity exceeds 1.05, and built to the requirements in 5D-1-4/5 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.



REFERENCES

1A-3-2/1.9 of the *Rules for Conditions of Classification (Part 1A)*

5D-1-4/1.3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

These notations are optional.

Example – A1, Offshore Support Vessel (AH, Supply, TOW) **HDC(5t/m², main deck)**, ,
 AMS...
 A1, Offshore Support Vessel (AH, Supply, TOW) **HLC(2.5,Tanks 3 and 5)**, ,
 AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Supply)

Offshore Support Vessel (Supply-CHEM)

Offshore Support Vessel (Supply-HNLS)

DESCRIPTION

The notation **✕ A1 Offshore Support Vessel (Supply)** will be assigned to vessels designed primarily for supply service to offshore installations, and built to the requirements of Part 5D, Chapter 2 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **✕ A1 Offshore Support Vessel (Supply-CHEM)** will be assigned to vessels designed primarily for supply service to offshore installations, that transport hazardous, noxious liquid substances or chemicals in bulk and built to the requirements of Part 5D, Chapter 2 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels* and comply with the OSV Chemical Code.

The notation **✕ A1 Offshore Support Vessel (Supply-HNLS)** will be assigned to vessels designed primarily for supply service to offshore installations, that transport hazardous, noxious liquid substances or chemicals in bulk, and built to the requirements of Part 5D, Chapter 2 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels* and comply with LHNS Guidelines by the flag Administration.

REFERENCES

1A-3-2/3 of the *Rules for Conditions of Classification (Part 1A)*

5D-2-3/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory for vessels that transport hazardous, noxious liquid substances or chemicals in bulk. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **✕ A1, Offshore Support Vessel (Supply), (E), ✕ AMS...**

✕ A1, Offshore Support Vessel (Supply-CHEM), (E), ✕ AMS...

✕ A1, Offshore Support Vessel (Supply-HNLS), (E), ✕ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (AH)

Offshore Support Vessel (TOW)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (AH)** will be assigned to vessels designed and equipped for anchor handling operations and built to the requirements of Part 5D, Chapter 3 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (TOW)** will be assigned to vessels designed and equipped for towing operations and built to the requirements of Part 5D, Chapter 3 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/5 of the *Rules for Conditions of Classification (Part 1A)*

5D-3-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **⊠ A1, Offshore Support Vessel (AH), ⊕, ⊠ AMS...**

⊠ A1, Offshore Support Vessel (TOW), ⊕, ⊠ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (FFV 1)

Offshore Support Vessel (FFV 1 NS)

Offshore Support Vessel (FFV 2)

Offshore Support Vessel (FFV 3)

Offshore Support Vessel (FFV 1 and 2)

Offshore Support Vessel (FFV 1 and 3)

FF Capable

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (FFV 1)** will be assigned to vessels with water spray protection for cooling the Fire Fighting Vessel's surfaces to enable close operation for early stages of fire fighting and rescue operations, with capabilities in accordance with 5D-4-1/Table 1, built in compliance with the requirements of Part 5D, Chapter 4 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (FFV 1 NS)** will be assigned to vessels without water spray protection, provided with the same firefighting capabilities as **FFV 1** in accordance with 5D-4-1/Table 1, but not equipped for close operation during early stages of firefighting and rescue operations, built in compliance with the requirements of Part 5D, Chapter 4 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (FFV 2)** or **(FFV 3)** will be assigned to vessels built in compliance with the requirements of Part 5D, Chapter 4 of the *ABS Rules for Building and Classing Marine Vessels* and for continuous fighting of large fires and cooling structures on fire, with capabilities in accordance with 5D-4-1/Table 1, and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (FFV 1 and 2)** or **⊠ A1 Offshore Support Vessel (FFV 1 and 3)** will be assigned to **⊠ A1 Offshore Support Vessel (FFV 2)** or **(FFV 3)** that also meet requirements for **FFV 1**.

The notation **FF Capable** may be assigned to vessels not in full compliance with the *ABS Rules for Building and Classing Marine Vessels* or not specifically built for the service intended to be covered by the Rules, but which have some fire fighting capability in addition to their regular service, considered and reviewed under the intent of the Rules, in relation to the specific fire fighting requirements of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/7 of the *Rules for Conditions of Classification (Part 1A)*

5D-4-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval, except **FF Capable**.

These notations are optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

- Example –
- ✘ A1, **Offshore Support Vessel (FFV 1)**, Ⓢ, ✘ AMS...
 - ✘ A1, **Offshore Support Vessel (FFV 1-NS)**, Ⓢ, ✘ AMS...
 - ✘ A1, **Offshore Support Vessel (FFV 2)**, Ⓢ, ✘ AMS...
 - ✘ A1, **Offshore Support Vessel (FFV 3)**, Ⓢ, ✘ AMS...
 - ✘ A1, **Offshore Support Vessel (FFV 1 and 2)**, Ⓢ, ✘ AMS...
 - ✘ A1, **Offshore Support Vessel (FFV 1 and 3)**, Ⓢ, ✘ AMS...
 - ✘ A1, **Offshore Support Vessel (TOW, FF Capable)**, Ⓢ, ✘ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (DSV AIR)

Offshore Support Vessel (DSV MIXED-GAS)

Offshore Support Vessel (DSV SAT)

Offshore Support Vessel (ROV)

DSV Capable

ROV Capable

DESCRIPTION

The notation **✕ A1 Offshore Support Vessel (DSV AIR)** will be assigned to vessels intended to support air diving systems (see 5D-5-1/Table 1) and complying with the applicable requirements of Part 5D, Chapter 5 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **✕ A1 Offshore Support Vessel (DSV MIXED-GAS)** will be assigned to vessels intended to support mixed-gas diving systems (see 5D-5-1/Table 1) and complying with the applicable requirements of Part 5D, Chapter 5 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **✕ A1 Offshore Support Vessel (DSV SAT)** will be assigned to vessels intended to support saturation diving systems (see 5D-5-1/Table 1) and complying with the applicable requirements of Part 5D, Chapter 5 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

Vessels that are intended to support multiple diving systems and complying with the applicable requirements of Part 5D, Chapter 5 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels* will be assigned the Class notation **✕ A1 Offshore Support Vessel (DSV)** followed by the appropriate notations for the diving systems. For example, vessels intended to support air and saturation diving systems may be assigned the Class notation **✕ A1 Offshore Support Vessel (DSV AIR/SAT)**.

The notation **✕ A1 Offshore Support Vessel (ROV)** will be assigned to vessels intended to support Remote Operated Vehicle – ROV (see 5D-5-1/Table 1) and complying with the applicable requirements of Part 5D, Chapter 5 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **DSV Capable** and/or **ROV Capable** may be assigned to vessels other than those above, having some diving and/or ROV support capability in addition to their regular service, considered and reviewed under the intent of the *ABS Rules for Building and Classing Marine Vessels*, in relation to the specific diving and/or ROV support requirements of the Rules.

REFERENCES

1A-3-2/9 of the *Rules for Conditions of Classification (Part 1A)*

5D-5-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval, except **DSV Capable** and **ROV Capable**.

These notations are optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

- Example –
- ☒ A1, Offshore Support Vessel (DSV AIR), Ⓢ, ☒ AMS...
 - ☒ A1, Offshore Support Vessel (DSV MIXED-GAS), Ⓢ, ☒ AMS...
 - ☒ A1, Offshore Support Vessel (DSV SAT), Ⓢ, ☒ AMS...
 - ☒ A1, Offshore Support Vessel (DSV AIR/SAT), Ⓢ, ☒ AMS...
 - ☒ A1, Offshore Support Vessel (DSV MIXED-GAS/SAT), Ⓢ, ☒ AMS...
 - ☒ A1, Offshore Support Vessel (ROV), Ⓢ, ☒ AMS...
 - ☒ A1, Offshore Support Vessel (DSV Capable), Ⓢ, ☒ AMS...
 - ☒ A1, Offshore Support Vessel (ROV Capable), Ⓢ, ☒ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (OSR-S1)

Offshore Support Vessel (OSR-S2)

Offshore Support Vessel (OSR-C1)

Offshore Support Vessel (OSR-C2)

DESCRIPTION

The notation **☒ A1 Offshore Support Vessel (OSR-S1)** will be assigned to vessels intended for recovery of oil from the water and shorelines in response to an oil spill in the marine environment, and built in compliance with the requirements for recovery of oil of unknown flash points and outfitted for the same in accordance with Sections 5D-6-3 and 5D-6-4 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*, and approved for oil recovery service at the assigned freeboard.

The notation **☒ A1 Offshore Support Vessel (OSR-S2)** will be assigned to vessels intended for recovery of oil from the water and shorelines in response to an oil spill in the marine environment, and built in compliance with the requirements for recovery of oil having a flash point exceeding 60°C (140°F) and outfitted for the same in accordance with Section 5D-6-6 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*, and approved for oil recovery service at the assigned freeboard.

The notation **☒ A1 Offshore Support Vessel (OSR-C1)** will be assigned to vessels built in compliance with the requirements for recovery of oil of unknown flash points but not outfitted for the same in accordance with Section 5D-6-5 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*, and approved for oil recovery service at the assigned freeboard.

The notation **☒ A1 Offshore Support Vessel (OSR-C2)** will be assigned to vessels intended for recovery of oil from the water and shorelines in response to an oil spill in the marine environment, and built in compliance with the requirements for recovery of oil having a flash point exceeding 60°C (140°F) but not outfitted for the same in accordance with Section 5D-6-7 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*, and approved for oil recovery service at the assigned freeboard.

REFERENCES

1A-3-2/11 of the *Rules for Conditions of Classification (Part 1A)*

5D-6-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of the **OSR-S1** or **OSR-S2** notation requires Class Committee approval.

The **OSR-S1** and **OSR-S2** notations are mandatory for vessels intended to recover oil from the water and shorelines in response to an oil spill. There may be mandatory requirements associated with this service, even if the notation is not selected. The **OSR-C1** and **OSR-C2** notations are optional.

Example – ☒ A1, Offshore Support Vessel (OSR-S1), ☒ AMS...
☒ A1, Offshore Support Vessel (OSR-S2), ☒ AMS...
☒ A1, Offshore Support Vessel (OSR-C1), ☒ AMS...
☒ A1, Offshore Support Vessel (OSR-C2), ☒ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (SSR)

GR A – (N)

GR B – (N)

GR C – (N)

SSR Capable (number of survivors, operational area)

DESCRIPTION

The notation **✕ A1 Offshore Support Vessel (SSR)** will be assigned to vessels which have been adapted and have special features for evacuation, reception, rescue and care of persons from another vessel at sea or an offshore installation, and built in accordance with the requirements of Part 5D, Chapter 7 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*, and approved for safety standby service at the assigned freeboards.

GR A (N), GR B (N), GR C (N) – These notations are assigned to vessels classed for Safety Standby Service, indicating the class designation together with the number of survivors (**N**), the vessel has been certified to accommodate. Group A (**GR A**) includes a number of survivors greater than 300, Group B (**GR B**) equal to or greater than 20 and less than or equal to 300 and Group C (**GR C**) less than 20.

SSR Capable (number of survivors, operational area) – This notation is assigned to vessels not in full compliance with the *ABS Rules for Building and Classing Marine Vessels* or not specifically built for the service intended to be covered by the *ABS Rules for Building and Classing Marine Vessels*, but which have some safety standby rescue capability in addition to their regular service, may be considered and reviewed under the intent of these Rules, in relation to the specific safety standby rescue requirements.

REFERENCES

1A-3-2/13 of the *Rules for Conditions of Classification (Part 1A)*

5D-7-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of these notations requires Class Committee approval, except **SSR Capable**.

These notations are mandatory if they represent the primary intended service. There may be mandatory requirements associated with this service, even if the notation is not selected. The **SSR Capable** notation is optional.

Example – **✕ A1, Offshore Support Vessel, SSR GR A (320), ⓔ, ✕ AMS...**

✕ A1, Offshore Support Vessel, SSR Capable (50, Coastwise less than 50NM), ⓔ, ✕ AMS...

✕ A1, Offshore Support Vessel, SSR Capable (30, Coastwise less than 30NM), ⓔ, ✕ AMS...

✕ A1, SSR Capable (50, Coastwise less than 50NM), ⓔ, ✕ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Pipe Lay)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (Pipe Lay)** will be assigned to vessels designed and equipped for the installation of subsea pipelines and built in compliance with the requirements of Part 5D, Chapter 8 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/15 of the *Rules for Conditions of Classification (Part 1A)*

5D-8-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **⊠ A1, Offshore Support Vessel (Pipe Lay), ⊕, ⊠ AMS, CRC...**

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Heavy Lift)

DESCRIPTION

The notation **✕ A1 Offshore Support Vessel (Heavy Lift)** will be assigned to vessels intended for the lifting of heavy loads in oil drilling and production operations, offshore construction and/or salvage operations, with a lifting capacity of 160 metric tons and above and built in compliance with the requirements of Part 5D, Chapter 9 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/17 of the *Rules for Conditions of Classification (Part 1A)*

5D-9-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **✕ A1, Offshore Support Vessel (Heavy Lift)**, **ⓔ**, **✕ AMS...**

Offshore Support Vessels

NOTATION

Offshore Support Vessel (WI)

Offshore Support Vessel (WI-READY)

Offshore Support Vessel (WIR)

Offshore Support Vessel (WIR-READY)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (WI)** will be assigned to vessels fitted with Riserless Well Intervention (RLWI) systems that comply with Section 5D-10-4 of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (WI-READY)** will be assigned to vessels designed to be riserless “well intervention ready” that comply with Section 5D-10-2 of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (WIR)** will be assigned to vessels fitted with Riser-based Well Intervention (RBWI) systems that comply with Section 5D-10-4 of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (WIR-READY)** will be assigned to vessels designed to be riser-based “well intervention ready” that comply with Section 5D-10-2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/19 of the *Rules for Conditions of Classification (Part 1A)*

5D-10-1/7 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of the **Offshore Support Vessel (WI)** or **Offshore Support Vessel (WIR)** notation requires Class Committee approval.

These notations are optional. There may be mandatory requirements associated with this service, even if the notation is not selected. The “**READY**” notations are optional.

Example – **⊠ A1, Offshore Support Vessel (WI), ⊕, ⊠ AMS...**

⊠ A1, Offshore Support Vessel (WI-READY), ⊕, ⊠ AMS...

⊠ A1, Offshore Support Vessel (WIR), ⊕, ⊠ AMS...

⊠ A1, Offshore Support Vessel (WIR-READY), ⊕, ⊠ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (WS)

Offshore Support Vessel (WS-READY)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (WS)** may be assigned to vessels fitted with well stimulation systems that comply with the relevant Sections in Part 5D, Chapter 11 and other relevant requirements of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (WS-READY)** may be assigned to vessels designed to be “well stimulation ready” that comply with Section 5D-11-6 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/21 and of the *Rules for Conditions of Classification (Part 1A)*

5D-11-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of the **Offshore Support Vessel (WS)** notation requires Class Committee approval.

The **Offshore Support Vessel (WS)** notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected. The “**READY**” notation is optional.

Example – **⊠ A1, Offshore Support Vessel (WS), ⊕, ⊠ AMS...**

⊠ A1, Offshore Support Vessel (WS-READY), ⊕, ⊠ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Well Test)

Offshore Support Vessel (WT-READY)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (Well Test)** may be assigned to vessels fitted with well test systems that comply with the requirements of Part 5D, Chapter 12 of the *ABS Rules for Building and Classing Marine Vessels*.

The notation **⊠ A1 Offshore Support Vessel (WT-READY)** may be assigned to vessels designed to be “well test ready” that comply with the requirements of Section 5D-12-2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/23 of the *Rules for Conditions of Classification (Part 1A)*

5D-12-1/7 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of the **Offshore Support Vessel (Well Test)** notation requires Class Committee approval.

The **Offshore Support Vessel (Well Test)** notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected. The “**READY**” notation is optional.

Example – **⊠ A1, Offshore Support Vessel (Well Test), ⊕, ⊠ AMS...**

⊠ A1, Offshore Support Vessel (WT-READY), ⊕, ⊠ AMS...

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Escort)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (Escort)** will be assigned to vessels intended for escort service (i.e., accompanying another vessel in transit) and designed and built to the requirements of Part 5D, Chapter 13 and other relevant sections of the ABS *Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/25 of the *Rules for Conditions of Classification (Part 1A)*

5D-13-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **⊠ A1, Offshore Support Vessel (Escort)**, **⊕**, **⊠ AMS...**

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Wind IMR)

DESCRIPTION

The notation **⊗ A1 Offshore Support Vessel (Wind IMR)** will be assigned to vessels intended for the installation, maintenance and repair of wind turbines and designed and built to the applicable requirements of Part 5D, Chapter 14 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/27 of the *Rules for Conditions of Classification (Part 1A)*

5D-14-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **⊗ A1, Offshore Support Vessel (Wind IMR), ⊕, ⊗ AMS...**

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Cable Lay)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (Cable Lay)** will be assigned to vessels designed and equipped for the installation, maintenance and repair of underwater telecommunication cables and power transmission cables and built in compliance with the requirements of Part 5D, Chapter 15 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/29 of the *Rules for Conditions of Classification (Part 1A)*

5D-15-1/3 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **⊠ A1, Offshore Support Vessel (Cable Lay), ⊕, ⊠ AMS...**

Offshore Support Vessels

NOTATION

Offshore Support Vessel (Subsea Service)

DESCRIPTION

The notation **⊠ A1 Offshore Support Vessel (Subsea Service)** will be assigned to vessels designed and equipped primarily for installation support, inspection, maintenance, repair and/or decommissioning of subsea systems which may include but are not limited to subsea trees, wellheads, manifolds, equipment and facilities/structures and built in compliance with the requirements of Part 5D, Chapter 16 and other relevant sections of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

1A-3-2/31 of the *Rules for Conditions of Classification (Part 1A)*

5D-16-1/5 of the *Rules for Building and Classing Marine Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional. There may be mandatory requirements associated with this service, even if the notation is not selected.

Example – **⊠ A1, Offshore Support Vessel (Subsea Service), ⊕, ⊠ AMS...**

Offshore Support Vessels

NOTATION

BP (xx)

DESCRIPTION

Bollard Pull (BP) – A notation assigned to an Towing Vessel or an Offshore Support Vessel intended for towing service, an Escort Vessel or an Offshore Support Vessel intended for escort service to denote the magnitude of the bollard pull obtained during the test in long tons, in accordance with 5D-3-1/5/5 or 5D-13-2/5 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5D-3-1/5.5, 5D-13-1/5.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

This notation is mandatory.

Example – ⚡ A1, Offshore Support Vessel (Escort), Ⓢ, ⚡ AMS, **BP (45)**...

Offshore Support Vessels

NOTATION

GRC(Type I or II, PS, or AS)

DESCRIPTION

This notation is assigned to a vessel or unit classed by ABS, which has an ABS Register of Offshore Access Gangway Systems permanently installed in compliance with the *ABS Guide for Certification of Offshore Access Gangways*.

Type I – signifies that the gangway system permits unrestricted flow of personnel transfer within the capacity limitation and is supported at both ends

Type II – signifies that the gangway system permits limited flow of personnel transfer

PS – signifies that the vessel or unit has an installed passive motion compensation gangway system designed, constructed, and tested in accordance with the respective requirements of the *ABS Guide for Certification of Offshore Access Gangways*

AS – signifies that the vessel or unit has an installed active or full active motion compensation gangway system designed, constructed, and tested in accordance with the respective requirements of the *ABS Guide for Certification of Offshore Access Gangways*

In the case of a vessel with more than one gangway, separate reviews and surveys for each gangway will be required, and multiple gangway systems are to be included in the notation.

REFERENCES

5D-1-1/5.7 of the *Rules for Building and Classing Marine Vessels*

Subsection 1/7 of the *Guide for Certification of Offshore Access Gangways*

REMARKS

This notation is optional.

Example – ✘ A1, Offshore Support Vessel (Wind IMR), Ⓢ, ✘ AMS, **GRC(Type I-PS)**...
✘ A1, Offshore Support Vessel (Wind IMR), Ⓢ, ✘ AMS, **GRC(Type I-AS), GRC(Type II-PS)**...

Offshore Support Vessels

NOTATION

QR

QR+

DESCRIPTION

Quick Release (QR) – A notation assigned to an Offshore Support Vessel equipped for the handling of anchors of offshore floating installations or equipped for towing operations indicating that it has a remotely controlled Quick Release device for the towing rope or towing wire, and that the arrangements are in accordance with 5D-3-4/7.1.2 of the *ABS Rules for Building and Classing Marine Vessels*.

Quick Release Plus (QR+) – A notation assigned to an Offshore Support Vessel equipped for the handling of anchors of offshore floating installations or equipped for towing operations within close quarters, ports or terminals indicating that it has an approved emergency release system for the towing winch, and that the arrangements are in accordance with 5D-3-4/7.17 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

5D-3-1/5.1 of the *Rules for Building and Classing Marine Vessels*

REMARKS

These notations are mandatory for OSVs with the notation **TOW**.

Example – ☒ A1, Offshore Support Vessel (TOW), Ⓢ, ☒ AMS, QR...

☒ A1, Offshore Support Vessel (TOW), Ⓢ, ☒ AMS, QR+...

Naval Ships

NOTATION

NAVAL COMBATANT

DESCRIPTION

This notation will be assigned to naval vessels built in accordance with the ABS *Guide for Building and Classing International Naval Ships* which are intended to operate in higher-threat environments, and whose primary mission involves the use of own-vessel weapons (e.g., guns, missiles) within a theater of operations.

Typical vessels covered under this type are cruisers, destroyers, frigates, and corvettes.

REFERENCES

1A-11-3/9.1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **NAVAL COMBATANT**, Ⓢ, ✕ AMS...

Naval Ships

NOTATION

NAVAL FORCE PROJECTION

DESCRIPTION

This notation will be assigned to naval vessels built in accordance with the ABS *Guide for Building and Classing International Naval Ships* which are intended to operate in higher-threat environments, and whose primary mission generally involves the conveyance of military personnel and/or other craft (e.g., aircraft, helicopters, landing craft) to and within a theater of operations.

Typical vessels covered under this type are conventionally-powered (non-nuclear) aircraft carriers, helicopter carriers, amphibious assault vessels, and amphibious support vessels.

REFERENCES

1A-11-3/9.3 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **NAVAL FORCE PROJECTION**, ⊕, ✕ AMS...

Naval Ships

NOTATION

NAVAL SUPPORT

DESCRIPTION

This notation will be assigned to naval vessels built in accordance with the ABS *Guide for Building and Classing International Naval Ships* which are intended to operate in lower-threat environments, for example in escort duties or in Economic Exclusion Zone (EEZ) protection, or where threat has been reduced through other means.

Typical vessels covered under this type are for combat support (fleet replenishment, landing ships), logistic support (supply, replenishment), and mine warfare (mine hunters, mine sweepers).

REFERENCES

1A-11-3/9.5 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **NAVAL SUPPORT**, ⊕, ✕ AMS...

Naval Ships

NOTATION

COAST GUARD

DESCRIPTION

This notation will be assigned to Coast Guard vessels built in accordance with the ABS *Guide for Building and Classing International Naval Ships* whose primary mission is maritime safety, mobility, law enforcement, environmental protection and local or national security or defense.

Typical vessels covered under this type are cutters, patrol boats, buoy tenders and icebreakers; and such will be appended as a further descriptor of the specific vessel type.

REFERENCES

1A-11-3/9.7 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **COAST GUARD CUTTER**, ⊕, ✕ AMS...

✕ A1, **COAST GUARD BUOY TENDER**, ⊕, ✕ AMS...

Naval Ships

NOTATION

NAVAL CRAFT

COASTAL NAVAL CRAFT

RIVERINE NAVAL CRAFT

DESCRIPTION

NAVAL CRAFT – This notation is assigned to naval vessels built in accordance with the ABS *Guide for Building and Classing International Naval Ships* which are intended for higher-speed, shorter-range operations, for example in coastal areas

Typical vessels covered under this type are patrol craft and fast attack craft.

COASTAL NAVAL CRAFT – This notation is to be assigned to naval vessels that are intended to operate on a coastal voyage with a maximum distance from safe harbor of 300 miles and a maximum voyage of 150 miles from a safe harbor when operating in the Winter Seasonal Zones as indicated in Annex II of the International Conference on Load Lines, 1966. Coastal Naval Craft are not permitted to perform transoceanic movements.

RIVERINE NAVAL CRAFT – This notation is to be assigned to naval vessels that are intended to operate in rivers, harbors, and coastlines with a maximum distance from safe harbor of 50 miles. Riverine Naval Craft are not permitted to perform transoceanic movements.

REFERENCES

1A-11-3/9.9 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ✘ A1, **NAVAL CRAFT**, ⊕, ✘ AMS...

✘ A1, **COASTAL NAVAL CRAFT**, ⊕, ✘ AMS...

✘ A1, **RIVERINE NAVAL CRAFT**, ⊕, ✘ AMS...

Naval Ships

NOTATION

GOVERNMENT SPECIAL PURPOSE

DESCRIPTION

This notation will be assigned to Government vessels built in accordance with the *ABS Guide for Building and Classing International Naval Ships* which are not otherwise addressed by other International Naval Ship notations whose primary mission is maritime safety, mobility, law enforcement, environmental protection and local or national security or defense.

Typical vessels covered under this type are border patrol boats, local harbor authority patrol boats, etc.; and such will be appended as a further descriptor of the specific vessel type.

REFERENCES

1A-11-3/9.11 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **GOVERNMENT SPECIAL PURPOSE BORDER PATROL**, ⊕, ✕ AMS...

Naval Ships

NOTATION

US NAVAL AUXILIARY SERVICE

DESCRIPTION

This notation will be assigned to naval vessels that have been constructed to military specifications (Mil-Specs) in lieu of ABS or other IACS Society Rules and are transferring into ABS Class.

Typical vessels covered under this type are for combat support (fleet replenishment, landing ships), logistic support (supply, replenishment), and mine warfare (mine hunters, mine sweepers).

REFERENCES

1A-11-3/9.5.1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **US NAVAL AUXILIARY SERVICE**, ⊕, ✕ AMS...

Naval Ships

NOTATION

AB (Weight, Range)

DESCRIPTION

This notation is assigned for ship structures which can survive Air Blast with only superficial damage, in accordance with Section 6-5-2 of the *ABS Guide for Building and Classing International Naval Ships*. This notation is designed to cover the entire structure above the waterline. **Weight** is the equivalent TNT weight of the explosive material and **Range** is the distance from the source of explosion assumed in the submitted analysis.

This notation will be listed in the *ABS Record* as a private notation.

REFERENCES

6-5-2/3 of the *Guide for Building and Classing International Naval Ships*

REMARKS

This notation is optional.

Example – ✘ A1, NAVAL COMBATANT, Ⓢ, ✘ AMS, **AB (1500 kg, 80 m)**...

Naval Ships

NOTATION

BFP1

BFP2

BFP3

DESCRIPTION

These notations indicate ballistic and fragment hazard protection. They will be listed in the ABS *Record* as private notations. The structures, assets or personnel spaces and the protection details covered by the notations are to be listed in the Line of Sight Plan or the Ballistic and Fragment Protection Plan (see 6-5-1/3.1 of the ABS *Guide for Building and Classing International Naval Ships*).

BFP1 is a notation available for Basic Level of Protection (LOP). It covers any arrangement on the ship that is specifically introduced to conceal structures, mission critical assets and/or personnel to provide protection from direct line of sight attack as shown in the Line of Sight Plan.

BFP2 is a notation available for Medium LOP. It covers any method on the ship to slow the speed of ballistic projectiles or fragments in the manner defined by the Naval Administration or agency authorized by the Naval Administration. Compliance with **BFP1** is not a prerequisite for **BFP2**. Scope and details of the LOP are to be shown on the Ballistic and Fragment Protection Plan.

BFP3 is a notation available for Enhanced LOP. This notation indicates that the structure, doors, windows, and openings cannot be penetrated by the designated threat (e.g., bullet or fragment). In conflict situations the threat can come from any direction, therefore this notation is intended to cover the entire structure above the waterline. Non-critical spaces may be exempted upon agreement with the Naval Administration. Scope and details of the LOP are to be shown on the Ballistic and Fragment Protection Plan.

REFERENCES

6-5-1/3 of the *Guide for Building and Classing International Naval Ships*

REMARKS

These notations are optional.

Example – ✘ A1, NAVAL COMBATANT, ⊕, ✘ AMS, **BFP1**...

✘ A1, NAVAL COMBATANT, ⊕, ✘ AMS, **BFP2**...

✘ A1, NAVAL COMBATANT, ⊕, ✘ AMS, **BFP3**...

Naval Ships

NOTATION

CBP (S1, S2 or S3); (M1, M2 or M3, by system)

DESCRIPTION

This notation is assigned to vessels and facilities with their class items enrolled in the Condition-Based Program (CBP) program that comply with the requirements of the ABS *Guide for Condition-Based Program for Government Vessels*.

This notation is appended by **S1, S2, or S3** (as applicable to the selected tier) for selected hull/structural items and by **M1, M2, or M3 (by system)** for all vessel machinery selected for inclusion in the program. Tiers 1, 2, and 3 are defined in Section 2, Figure 1 of the Guide.

REFERENCES

1/3.1 of the *Guide for Condition-Based Program for Government Vessels*

REMARKS

This notation is optional.

Example – ✕ A1, NAVAL COMBATANT, Ⓢ, ✕ AMS, **CBP (S2); (M3, Propulsion System; M2, Auxiliary Machinery)**...

Naval Ships

NOTATION

CBP Ready (S1, S2 or S3); (M1, M2 or M3, by system)

DESCRIPTION

This notation is assigned to vessels and facilities with their class items enrolled in the Condition-Based Program (CBP) program that comply with the requirements of Section 3 of the *ABS Guide for Condition-Based Program for Government Vessels*.

This notation is appended by **S1, S2, or S3** (as applicable to the selected tier) for selected hull/structural items and by **M1, M2, or M3 (by system)** for all vessel machinery selected for inclusion in the program. Tiers 1, 2, and 3 are defined in Section 2, Figure 1 of the Guide.

REFERENCES

1/3.1 of the *Guide for Condition-Based Program for Government Vessels*

REMARKS

This notation is optional.

Example – ✕ A1, NAVAL COMBATANT, Ⓢ, ✕ AMS, **CBP Ready (S2); (M3, Propulsion System; M2, Auxiliary Machinery)**...

Naval Ships

NOTATION

HHP

SHHP

DESCRIPTION

High Holding Power (HHP) – This notation for anchors is assigned for specially designed anchor for which proven holding power is not less than two times of an ordinary stockless anchor.

Super High Holding Power (SHHP) – This notation for anchors is assigned for specially designed anchor for which proven holding power is not less than four times of an ordinary stockless anchor.

REFERENCES

3-5-1/9.3 and 3-5-1/9.5 of the *Guide for Building and Classing International Naval Ships*

REMARKS

These notations are mandatory.

Example – ⚡ A1, NAVAL COMBATANT, Ⓢ, **HHP**, ⚡ AMS...

⚡ A1, NAVAL COMBATANT, Ⓢ, **SHHP**, ⚡ AMS...

Naval Ships

NOTATION

NavalSafe(x)

S

BSC

ES

SS

FS

EER

C

N

DG

All

DESCRIPTION

NavalSafe(x) – This notation is assigned to conventionally powered, non-nuclear surface craft used for non-commercial government service (such as Navy, Coast Guard, Border Patrol, and Customs) that comply with The Naval Ship Code (NSC). The notation is assigned once the performance requirements of the defined chapter(s) of NSC are met and the Naval Ship Safety Certificate is issued.

The index **x** in **NavalSafe(x)** notation represents: **S** (Structure), **BSC** (Buoyancy, Stability and Controllability), **ES** (Engineering Systems), **SS** (Seamanship Systems), **FS** (Fire Safety), **EER** (Escape, Evacuation and Rescue), **C** (Communication), **N** (Navigation), **DG** (Dangerous Goods), **All** (if all entries are applicable).

REFERENCES

6-4-1/3 of the *Guide for Building and Classing International Naval Ships*

REMARKS

This notation is optional.

Example – ✘ A1, NAVAL COMBATANT, (E), ✘ AMS, **NavalSafe(All)**...

✘ A1, COAST GUARD, (E), ✘ AMS, **NavalSafe(S, BSC, FS, N)**...

Naval Ships

NOTATION

UHS

DESCRIPTION

This notation is assigned to international naval ships in which the hull structure within $0.4L$ amidships of the vessel in sea-going conditions complies with the requirements in Part 6, Chapter 3 and Sections 3-2-1 to 3-2-11 of the *ABS Guide for Building and Classing International Naval Ships*.

REFERENCES

6-3-1/1 of the *Guide for Building and Classing International Naval Ships*

REMARKS

This notation is optional.

Example – ✕ A1, NAVAL COMBATANT, ⊕, **UHS**, ✕ AMS...

Naval Ships

NOTATION

UNDEX (Weight, Range)

DESCRIPTION

This notation is assigned for ship structures which can survive which can resist underwater shock with only superficial damage, in accordance with Section 6-5-3 of the *ABS Guide for Building and Classing International Naval Ships*. This notation is designed to cover the entire structure below the waterline and secondary shock effect on equipment and outfitting. Additionally, this may be presented as a series of notations covering multiple scenarios, annotated as **UNDEX (W1, R1, W2, R2, etc.)** to address multiple Concept of Operations (ConOps) events. **Weight** is the equivalent TNT weight of the explosive material and **Range** is the safe distance from the source of explosion assumed in the submitted analysis.

This notation will be listed in the *ABS Record* as a private notation.

REFERENCES

6-5-3/3 of the *Guide for Building and Classing International Naval Ships*

REMARKS

This notation is optional.

Example – ✘ A1, NAVAL COMBATANT, (E), ✘ AMS, **UNDEX (20 kg, 100 m)**...

Naval Ships

NOTATION

UNREP (Beam, Stern, Fore, Vert)

DESCRIPTION

UNREP (Beam, Stern, Fore, Vert) is a notation available for ships complying with the requirements for underway replenishment in this Guide, where **Beam, Stern, Fore,** and **Vert** are the replenishment methods denoted in the following Subsection. A ship may receive any combination of notations for the various replenishment methods.

UNREP (Beam) – This notation is assigned to a ship which complies with the requirements to conduct replenishment through the side-to-side transfer arrangements between both supplying and receiving ships.

UNREP (Stern) – This notation is assigned to a ship which complies with the requirements to conduct replenishment through the stern transfer arrangements of the supplying ship.

UNREP (Fore) – This notation is assigned to a ship which complies with the requirements to conduct replenishment through the fore transfer arrangements of the receiving ship.

UNREP (Vert) – This notation is assigned to a ship which complies with the requirements to conduct replenishment by air lifting for both supplying and receiving ships.

REFERENCES

6-6-2/1 and 6-6-2/3 of the *Guide for Building and Classing International Naval Ships*

REMARKS

This notation is optional.

- Example –
- ✕ A1, NAVAL SUPPORT, ⊕, ✕ AMS, **UNREP (Beam)**...
 - ✕ A1, NAVAL SUPPORT, ⊕, ✕ AMS, **UNREP (Stern)**...
 - ✕ A1, NAVAL SUPPORT, ⊕, ✕ AMS, **UNREP (Stern, Vert)**...
 - ✕ A1, NAVAL COMBATANT, ⊕, ✕ AMS, **UNREP (Beam)**...
 - ✕ A1, NAVAL COMBATANT, ⊕, ✕ AMS, **UNREP (Fore)**...
 - ✕ A1, NAVAL COMBATANT, ⊕, ✕ AMS, **UNREP (Fore, Vert)**...

High-Speed Craft

NOTATION

HSC

DESCRIPTION

High-Speed Craft (HSC) – This notation is assigned to craft that have been built in accordance with the *ABS Rules for Building and Classing High-Speed Craft*, or equivalent. Where approved by the Committee, for unrestricted ocean service, such craft will be distinguished in the *Record* by the symbols **✕ A1 HSC ✕ AMS** indicating compliance with the hull and machinery requirements of the Rules.

This notation for High-Speed Craft (**HSC**) is to be assigned to the following craft designed and built to the requirements of the *ABS Rules for Building and Classing High-Speed Craft*.

Mono-hull	Length of Craft (L) < 130 m (427 ft)
Multi-hull	L < 100 m (328 ft)
Surface Effects Ship (SES)	L < 90 m (295 ft)
Hydro Foil	L < 60 m (197 ft)

REFERENCES

1C-1-3/5 and 1C-2-2/1 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **✕ A1, HSC, ⊕, ✕ AMS...**

High-Speed Craft

NOTATION

HSC Coastal Craft

HSC Riverine Craft

DESCRIPTION

HSC Coastal Craft – This notation is to be assigned to craft that are intended to operate on a coastal voyage with a maximum distance from safe harbor of 300 miles and a maximum voyage of 150 miles from a safe harbor when operating in the Winter Seasonal Zones as indicated in Annex II of the International Conference on Load Lines, 1966. Coastal Craft are not permitted to perform transoceanic movements.

HSC Riverine Craft – This notation is to be assigned to craft that are intended to operate in rivers, harbors, and coastlines with a maximum distance from safe harbor of 50 miles. Riverine Craft are not permitted to perform transoceanic movements.

REFERENCES

1C-2-2/1 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

1.4.13 and 1.4.51 of the *IMO HSC Code*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ✘ A1, **HSC Coastal Craft**, ⊕, ✘ AMS...

✘ A1, **HSC Riverine Craft**, ⊕, ✘ AMS...

High-Speed Craft

NOTATION

HSC Passenger Craft (A)

HSC Passenger Craft (B)

HSC Ro-Ro Passenger Craft (A)

HSC Ro-Ro Passenger Craft (B)

DESCRIPTION

HSC Passenger Craft (A) or (B) – These notations are assigned to craft that have been designed and specifically fitted for the carriage of passengers and built to the applicable requirements of the *ABS Rules for Building and Classing High-Speed Craft* and the *IMO HSC Code* for special types of craft and which are approved by the Committee for voyages under restricted operational weather conditions at the assigned freeboards, will be classed and distinguished in the *Record* by the symbols **✕ A1 HSC** followed by an appropriate notation, i.e. **Passenger Craft (A)**, etc.

HSC Ro-Ro Passenger Craft (A) or (B) – These notations are assigned to craft carrying motor vehicles in addition to passengers and built to the applicable requirements of the *ABS Rules for Building and Classing High-Speed Craft* and the *IMO HSC Code* for special types of craft and which are approved by the Committee for voyages under restricted operational weather conditions at the assigned freeboards, will be classed and distinguished in the *Record* by the symbols **✕ A1 HSC** followed by an appropriate notation, i.e. **Passenger Craft (A)**, etc.

The **(A)** and **(B)** indicate a craft defined as a Category A Passenger Craft and a Category B Passenger Craft respectively in accordance with the *IMO HSC Code*.

REFERENCES

1C-2-2/1 and 1C-2-2/3 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

1.4.13 and 1.4.51 of the *IMO HSC Code*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – **✕ A1, HSC Passenger Craft (A), ⊕, ✕ AMS...**

High-Speed Craft

NOTATION

HSC Cargo Craft

DESCRIPTION

These notations are assigned to craft other than passenger craft, which are capable of maintaining the main functions of safety systems of unaffected spaces after damage in any one compartment on board, that have been built in accordance with the requirements of the *ABS Rules for Building and Classing High-Speed Craft* and the *IMO HSC Code* for special types of craft and which are approved by the Committee for voyages under restricted operational weather conditions at the assigned freeboards, will be classed and distinguished in the *Record* by the symbols **✕ A1 HSC** followed by the notation **Cargo Craft**.

The notation “**Cargo Craft**” defines a craft that is certified in accordance with the *IMO HSC Code*.

REFERENCES

1C-2-2/1 and 1C-2-2/3 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*
1.4.13 and 1.4.51 of the *IMO HSC Code*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **✕ A1, HSC Cargo Craft, Ⓢ, ✕ AMS...**

High-Speed Craft

NOTATION

HSC Crewboat

DESCRIPTION

The notation **HSC Crewboat** is assigned to a craft that is designed and constructed and specifically fitted for the transferring/transporting of industrial personnel in the offshore oil and gas industry between a shore base and offshore installations and vice versa. These craft may also carry cargo, however, Crewboats are not considered as Passenger Craft. The ABS craft type notation **HSC Crewboat** forms part of the classification designation assigned to craft built in accordance with the requirements of the *ABS Rules for Building and Classing High-Speed Craft*.

For craft intended to operate in various sea-states exceeding the design significant wave heights defined in 3-2-2/Table 1, **OE** notation may be assigned and be entered into the *Record*.

REFERENCES

1C-2-2/1 and 1C-2-2/3 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*
5-2-1/3.1 of the *Rules for Building and Classing High-Speed Craft*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for craft built to alternative requirements in Section 5-2-1 of the *ABS Rules for Building and Classing High-Speed Craft*.

Example – ✕ A1, **HSC Crewboat**, **OE**, ⊕, ✕ AMS...

High-Speed Craft

NOTATION

HSC (*special purpose*)

DESCRIPTION

This notation is assigned to special purpose craft, which have been built to the satisfaction of the ABS Surveyors to arrangements and scantlings approved for the particular purpose. Where approved by the Committee for the particular service, such craft will be classed and distinguished in the *Record* by the symbols **⊠ A1 HSC** followed by a description of the service for which special modifications to the ABS *Rules for Building and Classing High-Speed Craft* have been approved, e.g., **Special Government Services**, etc.

REFERENCES

1C-2-2/5 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – **⊠ A1, HSC Special Government Services, ⊕, ⊠ AMS...**

High-Speed Craft

NOTATION

xx m (or ft) Significant Wave Height

DESCRIPTION

This notation is assigned to craft which have been designed and built for limited service operation with a significant wave height less than the values defined in 3-2-2/Table 1 and 5-2-3/5 for each type of craft, where “**xx**” means digital number. Specific significant wave height to be used in the design is to be clearly indicated in operating manual for restriction of service.

REFERENCES

1C-2-2/7.3 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for vessels built for limited service operation with a significant wave height less than the values defined in the Rules.

Example – **⊗ A1, HSC Cargo Craft 3 m (or 13 ft) Significant Wave Height, ⊕, ⊗ AMS...**

High-Speed Craft

NOTATION

- **AMS**

DESCRIPTION

For craft complying with the *HSC Rules*, and new construction high-speed wind farm support craft receiving the **⊗ A1, HSC Wind-SC(A)** or **⊗ A1, HSC Wind-SC(B)** notation, the notation **• AMS** may be assigned in lieu of the **⊗ AMS** notation, provided the following conditions are met.

- Craft's machinery, boilers, and systems meet the requirements for **⊗ AMS** except for propulsion engines and their associated reduction gears, as well as auxiliary generators and their prime movers, and for hybrid or electrical installation power generating components below 25 kWh. Propulsion engines and their associated reduction gears, as well as auxiliary generators and their prime movers may be accepted based on Manufacturer's certificate and ABS Type Approval certificate, inclusive of Product Design Assessment (PDA) and Manufacturing Assessment (MA) with Product Quality Assurance (PQA) certification, as per Tier 4 definition in Appendix 1C-1-A3 of the *ABS Rules for Conditions of Classification – Light and High Speed Craft (Part 1C)*. Unit Certification via Survey During Fabrication will not be required in this instance. See also Appendix 1C-1-A2 of the *ABS Rules for Conditions of Classification – Light and High Speed Craft (Part 1C)* and Section 1, Table 2 of the *Requirements for Building and Classing Wind Farm Support Vessels*.
- Craft's Gross Tonnage is to be < 500.
- Craft is not to be for unrestricted service.
- Rated power of each propulsion engine or generator prime mover is to be < 1.5 MW.
- Craft has multiple propulsion units and has the capability of returning to place of refuge after a single failure.

For wind farm support craft:

- Craft with Gross Tonnage ≥ 500 and for domestic voyage are subject to special consideration.
- Bore sizes of propulsion engines and generator prime movers are not exceeding 300 mm (11.8 in.).
- Propulsion engines and generator prime movers are not using gases or other low-flashpoint fuels.

REFERENCES

1C-1-3/11 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

1/5.1.1 of the *Requirements for Building and Classing Wind Farm Support Vessels*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – **⊗ A1, HSC Wind-SC(A), OE, ⊕, • AMS ...**

⊗ A1, HSC Wind-SC(B), ⊕, • AMS ...

High-Speed Craft

NOTATION

HHP

SHHP

DESCRIPTION

High Holding Power (HHP) – This notation for anchors is assigned for specially designed anchor for which proven holding power is not less than two times of an ordinary stockless anchor.

Super High Holding Power (SHHP) – This notation for anchors is assigned for specially designed anchor for which proven holding power is not less than four times of an ordinary stockless anchor.

REFERENCES

3-5-1/9.3 and 3-5-1/9.5 of the *Rules for Building and Classing High-Speed Craft*

REMARKS

These notations are mandatory.

Example – ☒ A1, HSC, Ⓢ, **HHP**, ☒ AMS...

☒ A1, HSC, Ⓢ, **SHHP**, ☒ AMS...

High-Speed Craft

NOTATION

OE

DESCRIPTION

Operational Envelope (**OE**) – This notation is assigned to craft for which the structure has been reviewed based on the limitations given in a particular operational envelope. The operational envelope is given in terms of speed and significant wave height in the most unfavorable combination of length and direction of the wave. The operational envelope is, in general, approved during key structural drawings' review. The operational envelope is to be part of the Operating Manual for the craft and is to be used in the operational profile of the craft. The **OE** notation will be assigned for craft intended to operate within specified significant wave height vs. speed range.

REFERENCES

1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for craft that are not designed for the unrestricted wave height.

Example – ✘ A1, HSC Coastal Craft, **OE**, (E), ✘ AMS...

High-Speed Craft

NOTATION

R2-N

R2-N+

DESCRIPTION

A Classification notation addressing redundancy arrangements and indicating that a craft is fitted with multiple propulsion machines and propulsors that meet the **R2** requirements, and in addition, the machines and propulsors, and associated steering systems that are arranged in longitudinally-separated spaces such that failure or penetration of a single watertight transverse bulkhead will not affect the propulsion machine(s) and propulsor(s), and associated steering systems in the other space(s).

The mark **+** will be added to the **R2-N** notation to denote that the vessel's propulsion capability is such that, upon a single failure, propulsive power can be maintained or immediately restored to the extent necessary to withstand adverse weather conditions without drifting in accordance with 4-3-5/7.3. The lack of the mark **+** indicates that the vessel is not intended to withstand the adverse weather conditions in 4-3-5/7.3, but can maintain course and maneuverability at a reduced speed under normal expected weather conditions in accordance with 4-3-5/7.1.

Catamaran hulls with propulsion systems in each hull are eligible for class notation **R2-N**.

The **R2-N** notation is intended for craft designated for Naval Service.

REFERENCES

4-3-5/3v) of the *Rules for Building and Classing High-Speed Craft*

REMARKS

These notations are optional.

Example – ✘ A1, HSC Naval Craft, Ⓢ, ✘ AMS, **R2-N+** ...

High-Speed Craft

NOTATION

SH-DLA

DESCRIPTION

SafeHull Dynamic Load Approach (**SH-DLA**) – This notation is assigned to high-speed craft to provide enhanced structural analyses to assess the capabilities and sufficiency of a structural design. A fundamental requirement of **SH-DLA** is that the preliminary design of the structure be in accordance with the ABS *Rules for Building and Classing High-Speed Craft* criteria.

REFERENCES

1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

3-1-3/1 of the *Rules for Building and Classing High-Speed Craft*

REMARKS

This notation is optional.

Example – ☒ A1, HSC, ⊕, ☒ AMS, **SH-DLA**...

High-Speed Craft

NOTATION

Wind-SC(A)

Wind-SC(B)

DESCRIPTION

These notations may be assigned to a high-speed wind farm support craft based on the specifications described in the table below, provided that all the applicable requirements in the *ABS Requirements for Building and Classing Wind Farm Support Vessels* are fully satisfied.

<i>Gross Tonnage (GT)</i>	<i>Industrial Personnel (IP)</i>	<i>Domestic Voyage</i>	<i>International Voyage</i>
< 500	≤ 12	Wind-SC(A)	Wind-SC(A)
	> 12	Wind-SC(A)	Wind-SC(B)
≥ 500	Any	Wind-SC(B)	

* *Note:* Maximum number of persons onboard is subject to flag Administration approval.

All craft being certified as **⊗ A1, HSC Wind-SC(A)** are to comply with the **OE** notation as defined by 1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*, and the operational envelope is to be entered into the *Record*.

REFERENCES

1/5.1 & Section 1, Table 1 of the *Requirements for Building and Classing Wind Farm Support Vessels*

REMARKS

These notations are mandatory.

Example – **⊗ A1, HSC Wind-SC(A)**, OE, **Ⓢ**, **⊗ AMS** ...

⊗ A1, HSC Wind-SC(B), **Ⓢ**, **⊗ AMS** ...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

HSC Naval Craft

HSC Coastal Naval Craft

HSC Riverine Naval Craft

DESCRIPTION

HSC Naval Craft – This notation is assigned to naval vessels that have been built in accordance with the *ABS Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*, or equivalent and approved by the Committee. Such craft will be distinguished in the *Record* by the symbols **⊠ A1 HSC Naval Craft** **⊠ AMS** indicating compliance with the hull and machinery requirements of this Guide. **Naval Craft** notation is to be assigned to naval vessels with V/\sqrt{L} not less than 2.36 (1.3) that are intended to operate in the littoral environment but are capable of open ocean voyages with restrictions on significant wave height of 4.0 m (13.1 ft) for the Operational Design Condition and 6 m (19.7 ft) for the Survival Design Condition. Naval craft are limited to a maximum voyage of 300 miles from a safe harbor when operating in the Winter Seasonal Zones as indicated in Annex II of the International Conference on Load Lines, 1966. When operating on an open ocean voyage, craft are to avoid tropical cyclones and other severe weather events.

HSC Coastal Naval Craft – This notation is to be assigned to naval vessels with V/\sqrt{L} not less than 2.36 (1.3) that are intended to operate on a coastal voyage with restrictions on significant wave height of 2.5 m (8.2 ft) for the Operational Design Condition and 4 m (13.1 ft) for the Survival Design Condition. Coastal Naval Craft are limited to a maximum distance from safe harbor of 300 miles and a maximum voyage of 150 miles from a safe harbor when operating in the Winter Seasonal Zones as indicated in Annex II of the International Conference on Load Lines, 1966. They are not permitted to perform transoceanic movements.

HSC Riverine Naval Craft – This notation is to be assigned to naval vessels with V/\sqrt{L} not less than 2.36 (1.3) that are intended to operate in rivers, harbors, and coastlines with restrictions on significant wave height of 0.5 m (1.6 ft) for the Operational Design Condition and 1.25 m (4.1 ft) for the Survival Design Condition. Riverine Naval Craft are limited to a maximum distance from safe harbor of 50 miles. They are not permitted to perform transoceanic movements.

REFERENCES

1C-1-3/5 and 1C-3-2/1.3 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – **⊠ A1, HSC Naval Craft, ⊕, ⊠ AMS...**

⊠ A1, HSC Coastal Naval Craft, ⊕, ⊠ AMS...

⊠ A1, HSC Riverine Naval Craft, ⊕, ⊠ AMS...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

DV Naval Craft

DV Coastal Naval Craft

DV Riverine Naval Craft

DESCRIPTION

DV Naval Craft – This notation is to be assigned to a naval vessel with V/\sqrt{L} less than 2.36 (1.3) that is intended to operate in the littoral environment, but is capable of open ocean voyages with restrictions on significant wave height of 4.0 m (13.1 ft) for the Operational Design Condition and 6 m (19.7 ft) for the Survival Design Condition. Naval Craft are limited to a maximum voyage of 300 miles from a safe harbor when operating in the Winter Seasonal Zones as indicated in Annex II of the International Conference on Load Lines, 1966. When operating on an open ocean voyage, craft are to avoid tropical cyclones and other severe weather events.

DV Coastal Naval Craft – This notation is to be assigned to a naval vessel with V/\sqrt{L} less than 2.36 (1.3) that is intended to operate on a coastal voyage with restrictions on significant wave height of 2.5 m (8.2 ft) for the Operational Design Condition and 4 m (13.1 ft) for the Survival Design Condition. Coastal Naval Craft are limited to a maximum distance from safe harbor of 300 miles and a maximum voyage of 150 miles from a safe harbor when operating in the Winter Seasonal Zones as indicated in Annex II of the International Conference on Load Lines, 1966. They are not permitted to perform transoceanic movements.

DV Riverine Naval Craft – This notation is to be assigned to a naval vessel with V/\sqrt{L} less than 2.36 (1.3) that is intended to operate in rivers, harbors, and coast lines with restrictions on significant wave height of 0.5 m (1.6 ft) for the Operational Design Condition and 1.25 m (4.1 ft) for the Survival Design Condition. Riverine Naval Craft are limited to a maximum distance from safe harbor of 50 miles. They are not permitted to perform transoceanic movements.

REFERENCES

1C-3-2/1.1 of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, **DV Naval Craft**, ⊕, ☒ AMS...

☒ A1, **DV Coastal Naval Craft**, ⊕, ☒ AMS...

☒ A1, **DV Riverine Naval Craft**, ⊕, ☒ AMS...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

AB (*Weight, Range*)

DESCRIPTION

This notation is assigned for ship structures which can survive Air Blast with only superficial damage, in accordance with Section 6-5-2 of the *ABS Guide for Building and Classing International Naval Ships*. This notation is designed to cover the entire structure above the waterline. **Weight** is the equivalent TNT weight of the explosive material and **Range** is the distance from the source of explosion assumed in the submitted analysis.

This notation will be listed in the *ABS Record* as a private notation.

REFERENCES

3-1-4/5 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, DV Naval Craft, Ⓢ, ✘ AMS, **AB (1500 kg, 80 m)**...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

BFP1

BFP2

BFP3

DESCRIPTION

These notations indicate ballistic and fragment hazard protection. They will be listed in the *ABS Record* as private notations. The structures, assets or personnel spaces and the protection details covered by the notations are to be listed in the Line of Sight Plan or the Ballistic and Fragment Protection Plan (see 6-5-1/3.1 of the *ABS Guide for Building and Classing International Naval Ships*).

BFP1 is a notation available for Basic Level of Protection (LOP). It covers any arrangement on the ship that is specifically introduced to conceal structures, mission critical assets and/or personnel to provide protection from direct line of sight attack as shown in the Line of Sight Plan.

BFP2 is a notation available for Medium LOP. It covers any method on the ship to slow the speed of ballistic projectiles or fragments in the manner defined by the Naval Administration or agency authorized by the Naval Administration. Compliance with **BFP1** is not a prerequisite for **BFP2**. Scope and details of the LOP are to be shown on the Ballistic and Fragment Protection Plan.

BFP3 is a notation available for Enhanced LOP. This notation indicates that the structure, doors, windows, and openings cannot be penetrated by the designated threat (e.g., bullet or fragment). In conflict situations the threat can come from any direction, therefore this notation is intended to cover the entire structure above the waterline. Non-critical spaces may be exempted upon agreement with the Naval Administration. Scope and details of the LOP are to be shown on the Ballistic and Fragment Protection Plan.

REFERENCES

3-1-4/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

These notations are optional.

Example – ✘ A1, DV Naval Craft, ☉, ✘ AMS, **BFP1**...

✘ A1, DV Naval Craft, ☉, ✘ AMS, **BFP2**...

✘ A1, DV Naval Craft, ☉, ✘ AMS, **BFP3**...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

NavalSafe(x)

S

BSC

ES

SS

FS

EER

C

N

DG

All

DESCRIPTION

NavalSafe(x) – This notation is assigned to ships complying with the performance requirements defined in the NSC and after the Naval Ship Safety Certificate is issued. Refer to Chapter 6-4 of the *ABS Guide for Building and Classing International Naval Ships* for more information.

The index **x** in **NavalSafe(x)** notation represents: **S** (Structure), **BSC** (Buoyancy, Stability and Controllability), **ES** (Engineering Systems), **SS** (Seamanship Systems), **FS** (Fire Safety), **EER** (Escape, Evacuation and Rescue), **C** (Communication), **N** (Navigation), **DG** (Dangerous Goods), **All** (if all entries are applicable).

REFERENCES

3-1-4/1 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

These notations are optional.

Example – ✘ A1, DV Naval Craft, Ⓔ, ✘ AMS, **NavalSafe(All)**...

✘ A1, HSC Naval Craft, Ⓔ, ✘ AMS, **NavalSafe(S, BSC, FS, N)**...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

OE

DESCRIPTION

Operational Envelope (**OE**) – This notation is assigned to craft for which the structure has been reviewed based on the limitations given in a particular operational envelope. The operational envelope is given in terms of speed and significant wave height in the most unfavorable combination of length and direction of the wave. The operational envelope is, in general, approved during key structural drawings' review. The operational envelope is to be part of the Operating Manual for the craft and is to be used in the operational profile of the craft. The **OE** notation will be assigned for craft intended to operate within specified significant wave height vs. speed range.

REFERENCES

1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for craft that are not designed for the unrestricted wave height.

Example – ✘ A1, HSC Coastal Naval Craft, **OE**, Ⓢ, ✘ AMS ...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

R2-N

R2-N+

DESCRIPTION

A Classification notation addressing redundancy arrangements and indicating that a vessel is fitted with multiple propulsion machines and propulsors that meet the **R2** requirements, and in addition, the machines and propulsors, and associated steering systems that are arranged in longitudinally-separated spaces such that failure or penetration of a single watertight transverse bulkhead will not affect the propulsion machine(s) and propulsor(s), and associated steering systems in the other space(s).

The mark **+** will be added to the **R2-N** notation to denote that the vessel's propulsion capability is such that, upon a single failure, propulsive power can be maintained or immediately restored to the extent necessary to withstand adverse weather conditions without drifting in accordance with 4-3-7/7.3. The lack of the mark **+** indicates that the vessel is not intended to withstand the adverse weather conditions in 4-3-7/7.3, but can maintain course and maneuverability at a reduced speed under normal expected weather conditions in accordance with 4-3-7/7.1.

Catamaran hulls with propulsion systems in each hull are eligible for class notation **R2-N**.

The **R2-N** notation is intended for vessels designated for Naval Service.

REFERENCES

4-3-7/3 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

These notations are optional.

Example – ✘ A1, HSC Naval Craft, Ⓢ, ✘ AMS, **R2-N+** ...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

SH-DLA

DESCRIPTION

SafeHull Dynamic Load Approach (**SH-DLA**) – This notation is assigned to a light warship or high-speed naval vessel to provide enhanced structural analyses to assess the capabilities and sufficiency of a structural design. A fundamental requirement of **SH-DLA** is that the preliminary design of the structure be in accordance with the ABS *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels* criteria.

REFERENCES

1C-1-3/Table B of the *Rules for Conditions of Classification – Light and High-Speed Craft (Part 1C)*
3-1-3/1 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

This notation is optional.

Example – ✘ A1, HSC Naval Craft, (E), ✘ AMS, **SH-DLA**...

Light Warships, Patrol and High-Speed Naval Vessels

NOTATION

UNDEX (Weight, Range)

DESCRIPTION

This notation is assigned for ship structures which can survive which can resist underwater shock with only superficial damage, in accordance with Section 6-5-3 of the *ABS Guide for Building and Classing International Naval Ships*. This notation is designed to cover the entire structure below the waterline and secondary shock effect on equipment and outfitting. Additionally, this may be presented as a series of notations covering multiple scenarios, annotated as **UNDEX (W1, R1, W2, R2, etc.)** to address multiple Concept of Operations (ConOps) events. **Weight** is the equivalent TNT weight of the explosive material and **Range** is the safe distance from the source of explosion assumed in the submitted analysis.

This notation will be listed in the *ABS Record* as a private notation.

REFERENCES

3-1-4/7 of the *Rules for Building and Classing Light Warships, Patrol and High-Speed Naval Vessels*

REMARKS

This notation is optional.

Example – ✕ A1, DV Naval Craft, Ⓢ, ✕ AMS, **UNDEX (20 kg, 100 m)**...

Yachting Service

NOTATION

Yachting Service

DESCRIPTION

This notation is assigned to vessels designed for pleasure yachting service and built to the applicable requirements in Part 3 and Part 4 and other relevant sections of the *ABS Rules for Building and Classing Yachts*.

Motor yachts receiving a **Yachting Service** notation are permitted to operate with unlimited range geographically in association with voyages planned based on weather routing and with restrictions on significant wave height of 4.5 m (14.8 ft) for the *Operational Design Condition* and 6 m (19.7 ft) for the *Maximum Design Condition*.

REFERENCES

1A-9-2/1.1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Yachting Service**, ✕ AMS...

Yachting Service

NOTATION

Yachting Service R

DESCRIPTION

This notation is assigned to vessels designed for restricted pleasure yachting service and built to the applicable requirements in Part 3 and Part 4 and other relevant sections of the *ABS Rules for Building and Classing Yachts*.

Restricted service yachts are restricted to operate a distance from a place of refuge of not more than 200 nautical miles and with restrictions on significant wave height of less than 3.5 m (11.5 ft) for the *Operational Design Condition* and 4.5 m (14.8 ft) for the *Maximum Design Condition*. Voyages between 100 nautical miles and 200 nautical miles from a place of refuge must include voyage planning based on weather routing.

REFERENCES

1A-9-2/1.3 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Yachting Service R**, ✕ AMS...

Yachting Service

NOTATION

Commercial Yachting Service

DESCRIPTION

This notation is assigned to yachts built as noted in 1-9-2/1.1 which are chartered as motor, sailing, or motor-sailing yachts or carry passengers for revenue, are not considered by the Administration to be a SOLAS passenger vessel or an IMO HSC Code craft, do not carry more than 12 charter guests, do not carry cargo, and are built to the applicable requirements in Part 3, Part 4, Part 5, and other relevant sections of the *ABS Rules for Building and Classing Yachts*. In addition to the Guide, Commercial Yachts are to comply with recognized statutory requirements for commercial yachts such as the UK MCA *The Large Commercial Yacht Code (LY3)*.

Commercial Yachts are not eligible for the restricted service notation **Yachting Service R**. Motor yachts receiving a **Commercial Yachting Service** notation are permitted to operate with unlimited range geographically in association with voyages planned based on weather routing and with restrictions on significant wave height of 4.5 m (14.8 ft) for the *Operational Design Condition* and 6 m (19.7 ft) for the *Maximum Design Condition*.

REFERENCES

1A-9-2/1.5 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – \otimes A1, **Commercial Yachting Service**, \oplus , \otimes AMS...

Yachting Service

NOTATION

Passenger Yachting Service

DESCRIPTION

This notation is assigned to commercial or private yachts of any length, constructed of steel or aluminum, that are not considered by the Administration to be a SOLAS passenger vessel or an IMO HSC Code craft, that carry 13 to 36 passengers, do not carry cargo and are built to the applicable requirements detailed below:

- i)* Class items are to be in accordance with Part 5C, Chapter 7 of the *Marine Vessel Rules* in regard to structural, mechanical, and electrical requirements. (Where considered appropriate based on the yacht's Rule Length *L*, parts of the *ABS Rules for Building and Classing Marine Vessels* may be applied.)
- ii)* Statutory items are to be in compliance with MCA "REG 13-36 Passenger Yacht Code" for Red Ensign flag States or SOLAS Passenger vessel regulations (<36 passengers) for other flags not having their own code. Where a flag State has alternative requirements, statutory items may be considered to be in compliance with these requirements. The use of the REG Passenger Yacht Code by flag states other than Red Ensign is to be in accordance with the provisions of the REG Passenger Yacht Code.

Passenger yachts are to comply with the operational limits in the flag state Passenger Yacht Code.

REFERENCES

1A-9-2/1.7 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – \otimes A1, **Passenger Yachting Service**, \oplus , \otimes AMS...

Yachting Service

NOTATION

(☒) AMS

DESCRIPTION

The notation (☒) **AMS** may be assigned in lieu of ☒ **AMS** for all new construction yachts receiving the ☒ **A1 Commercial Yachting Service** notation and for all new construction yachts over 61 m (200 ft) in length receiving the ☒ **A1 Yachting Service** notation, provided that all yacht's machinery, boilers and systems meet all the requirements for ☒ **AMS** except for propulsion engines and their associated reduction gears, as well as auxiliary generators and their prime movers only.

Propulsion engines and their associated reduction gears, as well as auxiliary generators and their prime movers may be accepted based on Manufacturer's Work certificate and valid ABS Type Approval Certification, inclusive of Product Design Assessment (PDA) and Manufacturing Assessment (MA), as per Tier 3 definition in Appendix 1A-1-A4 of the *ABS Rules for Conditions of Classification (Part 1A)*.

REFERENCES

1A-9-2/3 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ☒ A1, Commercial Yachting Service, (☒) **AMS**...

☒ A1, Yachting Service, (☒) **AMS**...

Yachting Service

NOTATION

COMF(Y)

COMF+(Y)

DESCRIPTION

COMF(Y) is a notation assigned to a yacht complying with the minimum criteria for Owner/guest comfort (i.e., whole-body vibration and noise). This notation is assigned to yachts built in accordance with the requirements of the *ABS Guide for Comfort on Yachts*.

COMF+(Y) is a notation assigned to a yacht complying with the minimum criteria for Owner/guest comfort (i.e., whole-body vibration and noise) and additional criteria with respect to whole-body vibration, including motion sickness. This notation is assigned to yachts built in accordance with the requirements of the *ABS Guide for Comfort on Yachts*.

REFERENCES

Subsection 1/9 of the *Guide for Comfort on Yachts*

REMARKS

These notations are optional.

Example – ☒ A1, Yachting Service, ☒ AMS, **COMF(Y)**...

☒ A1, Yachting Service, ☒ AMS, **COMF+(Y)**...

Yachting Service

NOTATION

HHP

SHHP

DESCRIPTION

High Holding Power (HHP) – This notation for anchors is assigned for specially designed anchor for which proven holding power is not less than two times of an ordinary stockless anchor.

Super High Holding Power (SHHP) – This notation for anchors is assigned for specially designed anchor for which proven holding power is not less than four times of an ordinary stockless anchor.

REFERENCES

3-5-1/9.3 and 3-5-1/9.5 of the *Rules for Building and Classing Yachts*

REMARKS

These notations are mandatory for vessels fitted with high holding power anchors.

Example – ☒ A1, Yachting Service, Ⓢ, **HHP**, ☒ AMS...

☒ A1, Yachting Service, Ⓢ, **SHHP**, ☒ AMS...

Barges – Ocean Services

NOTATION

Barge

DESCRIPTION

This notation is assigned to barges designed and built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry a variety of cargoes as stated by the Rules.

REFERENCES

1A-5-2/3.1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Barge**...

Barges – Ocean Services

NOTATION

Accommodation Barge

DESCRIPTION

This notation is assigned to barges designed and built in accordance with the ABS *Rules for Building and Classing Steel Barges* (Section 5-3-6 and other applicable requirements) which operate offshore as accommodation barges or other barge types that are provided with accommodations in support of the workings of the barge.

Class notation **Ⓟ**, as defined in 2/3.5 of the ABS *Requirements for Position Mooring Systems*, is required for accommodation barges with the anchoring arrangement as sole means of position keeping (i.e., DP system is not installed or does not have the required redundancy).

REFERENCES

1A-5-2/5.33 of the *Rules for Conditions of Classification (Part 1A)*

5-3-6/1.3 of the *Rules for Building and Classing Steel Barges*

5-3-6/1.5.1(a) of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **Ⓟ A1, Accommodation Barge...**

Barges – Ocean Services

NOTATION

ATB

DESCRIPTION

Articulated Tug Barge – This notation is assigned to barges intended for a tug-barge combination built in accordance with the *ABS Rules for Building and Classing Steel Barges* wherein a tug is mated to a barge with an special connection system such that the tug is secured in the barge notch or on fenders by mechanical means, other than just wire ropes, chains, lines or other tackles.

The towing vessel is mated to the barge such that the towing vessel is capable of either pushing the barge in Tug-Barge integrated mode or towing the barge by hawser in a separate mode.

The tug and the barge are to be classed as two separate vessels but where applicable will be cross-referenced in the *Record*.

REFERENCES

5-3-1/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Barge ATB**...

Barges – Ocean Services

NOTATION

Cable Laying

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* for unrestricted service that are primarily engaged in installation, maintenance and repair of underwater telecommunication cables and power transmission cables.

REFERENCES

1A-5-2/5.31 of the *Rules for Conditions of Classification (Part 1A)*

5-3-5/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Barge Cable Laying...**

Barges – Ocean Services

NOTATION

Chemical Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry dangerous chemicals.

REFERENCES

1A-5-2/5.5 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, **Chemical Tank Barge**...

Barges – Ocean Services

NOTATION

Crane CRC

DESCRIPTION

This notation is assigned to barges fitted with cranes permanently installed on board the barge and intended for operations other than supply of provisions and maintenance of the barge, built in accordance with the *ABS Rules for Building and Classing Steel Barges* and the *ABS Guide for Certification of Lifting Appliances*.

REFERENCES

1A-5-2/5.27 of the *Rules for Conditions of Classification (Part 1A)*

5-3-3/5.5 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, **Barge Crane CRC**...

Barges – Ocean Services

NOTATION

Drilling Tender Barge

DESCRIPTION

This notation is assigned to barges fitted with facilities to carry persons that is principally intended as support to an offshore drilling unit and are built in accordance with the ABS *Requirements for Building and Classing Drilling Tender Barges*.

REFERENCES

1/3.1 of the *Requirements for Building and Classing Drilling Tender Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, **Drilling Tender Barge...**

Barges – Ocean Services

NOTATION

Fuel Oil Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry petroleum products with flash point above 60°C (140°F) (closed cup test).

REFERENCES

1A-5-2/5.3 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, Fuel Oil Tank Barge...

Barges – Ocean Services

NOTATION

Fuel Oil or Chemical Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry petroleum products or dangerous chemicals, but not at the same time, as stated in 1A-5-2/3.5 and 1A-5-2/3.7 of the *Rules for Conditions of Classification (Part 1A)*.

REFERENCES

1A-5-2/5.15 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Fuel Oil or Chemical Tank Barge**...

Barges – Ocean Services

NOTATION

Fuel Oil and Chemical Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry petroleum products and dangerous chemicals, at the same time, as stated in 1A-5-2/3.5 and 1A-5-2/3.7 of the *Rules for Conditions of Classification (Part 1A)*.

REFERENCES

1A-5-2/5.17 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Fuel Oil and Chemical Tank Barge**...

Barges – Ocean Services

NOTATION

Independent Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry cargo in independent tanks with a working pressure below 2.06 bar (2.1 kgf/cm², 30 psi).

REFERENCES

1A-5-2/5.11 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **☒ A1, Independent Tank Barge...**

Barges – Ocean Services

NOTATION

ITB

DESCRIPTION

Integrated Tug Barge – This notation is assigned to barges intended for a tug-barge combination built in accordance with the *ABS Rules for Building and Classing Steel Barges* wherein a tug is mated to a barge with an special connection system such that the tug is secured in the barge notch or on fenders by mechanical means, other than just wire ropes, chains, lines or other tackles.

The tug and the barge are to be classed as two separate vessels but where applicable will be cross-referenced in the *Record*.

REFERENCES

1A-5-2/5.23 of the *Rules for Conditions of Classification (Part 1A)*

5-3-1/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **(Gulf of Mexico) Barge ITB...**

Barges – Ocean Services

NOTATION

Liquefied Gas Tank Barge

DESCRIPTION

This notation is assigned to barges (manned and unmanned as established by the flag Administration) built in accordance with the *ABS Rules for Building and Classing Steel Barges*, and intended to carry those liquid gases addressed by the International Code for the Construction and Equipment of Ships Carrying Liquid Gases in Bulk.

REFERENCES

1A-5-2/5.7 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Liquefied Gas Tank Barge**...

Barges – Ocean Services

NOTATION

Oil Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry petroleum products with flash point at or below 60°C (140°F), closed cup test.

REFERENCES

1A-5-2/5.1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, **Oil Tank Barge**...

Barges – Ocean Services

NOTATION

Oil or Chemical Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges*, and intended to carry petroleum products or dangerous chemicals, but not at the same time, as stated in 1A-5-2/3.3 and 1A-5-2/3.7 of the *Rules for Conditions of Classification (Part 1A)*.

REFERENCES

1A-5-2/5.19 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Oil or Chemical Tank Barge**...

Barges – Ocean Services

NOTATION

Oil and Chemical Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges*, and intended to carry petroleum products and dangerous chemicals, at the same time, as stated in 1-5-2/3.3 and 1-5-2/3.7 of the Rules.

REFERENCES

1A-5-2/5.21 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Oil and Chemical Tank Barge**...

Barges – Ocean Services

NOTATION

OSR-S1

OSR-C1

OSR-S2

OSR-C2

DESCRIPTION

OSR-S1 – This notation is assigned to barges built in accordance with the *ABS Rules for Building and Classing Steel Barges* for recovery of oil of unknown flash points and outfitted for the same, and approved for oil recovery service at the assigned freeboard.

OSR-C1 – This notation is assigned to barges built in accordance with the *ABS Rules for Building and Classing Steel Barges* for recovery of oil of unknown flash points but not outfitted for the same, and approved for oil recovery service at the assigned freeboard.

OSR-S2 – This notation is assigned to barges built in accordance with the *ABS Rules for Building and Classing Steel Barges* for recovery of oil having a flash point exceeding 60°C (140°F) and outfitted for the same, and approved for oil recovery service at the assigned freeboard.

OSR-C2 – This notation is assigned to barges built in accordance with the *ABS Rules for Building and Classing Steel Barges* for recovery of oil having a flash point exceeding 60°C (140°F) but not outfitted for the same, and approved for oil recovery service at the assigned freeboard.

REFERENCES

1A-5-2/5.25 of the *Rules for Conditions of Classification (Part 1A)*

5-3-2/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of the **OSR-S1** or **OSR-S2** notation requires Class Committee approval.

The **OSR-S1** and **OSR-S2** notations are mandatory. **OSR-C1** and **OSR-C2** are optional.

Example – ☒ A1, Barge (**OSR-S1**)...

☒ A1, Barge (**OSR-C1**)...

☒ A1, Barge (**OSR-S2**)...

☒ A1, Barge (**OSR-C2**)...

Barges – Ocean Services

NOTATION

Pipe Laying

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended for unrestricted service that are primarily engaged in installation of subsea pipelines.

REFERENCES

1A-5-2/5.29 of the *Rules for Conditions of Classification (Part 1A)*

5-3-4/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Barge Pipe Laying...**

Barges – Ocean Services

NOTATION

Pressure Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges* and intended to carry cargo in independent tanks with a working pressure at 2.06 bar (2.1 kgf/cm², 30 psi) or above.

REFERENCES

1A-5-2/5.13 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, **Pressure Tank Barge**...

Barges – Ocean Services

NOTATION

Tank Barge

DESCRIPTION

This notation is assigned to barges built in accordance with the ABS *Rules for Building and Classing Steel Barges*, which are intended to carry liquid in bulk.

REFERENCES

1A-5-2/5.9 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, Tank Barge...

Barges – Ocean Services

NOTATION

Wind IMR

DESCRIPTION

This notation is assigned to barges built in accordance with Section 5D-14-1 of the ABS *Rules for Building and Classing Marine Vessels* which are engaged in the installation, maintenance, and repair of offshore wind turbines and may include various equipment used to perform or support functions such as pile driving, installation, maintenance, and repair of jackets, towers, nacelles, and/or blades.

REFERENCES

5-3-7/1.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Barge (Wind IMR)...

Barges – Ocean Services

NOTATION

⊠ AMS-NP

DESCRIPTION

The notation ⊠ **AMS-NP** may be assigned to thruster machinery and systems used for short field moves (consisting of moving the unit from one work location to another location within the same area of operation, that takes no longer than 12 hours and is conducted in daylight hours) of non-propelled units and complying with the requirements of the *Marine Vessel Rules* as applied to self-propelled units, manufactured and installed under ABS survey and found satisfactory after trials.

REFERENCES

1A-5-2/5.35 of the *Rules for Conditions of Classification (Part 1A)*

5-3-6/1.5.3 of the *Rules for Building and Classing Steel Barges*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, Oil Tank Barge, ⊕, ⊠ **AMS-NP**...

⊠ A1, Accommodation Barge, ⊕, ⊠ **AMS-NP**...

Barges – Ocean Services

NOTATION

LNG Bunkering

LNG Bunkering, VRS

DESCRIPTION

This notation is assigned to a liquefied gas carrier arranged for regular LNG bunkering service, designed, constructed, and tested in accordance with the requirements of the ABS *Guide for LNG Bunkering*.

Vapor Return System (**VRS**) - Where a barge assigned the **LNG Bunkering** notation incorporates an optional Vapor Return System, the **VRS** notation may be assigned. The Vapor Return System is to be designed, constructed and tested in accordance with 2/5.5.2 of the ABS *Guide for LNG Bunkering*.

REFERENCES

Subsection 1/7 of the *Guide for LNG Bunkering*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Liquefied Gas Tank Barge, **LNG Bunkering**, ©...

☒ A1, Liquefied Gas Tank Barge, **LNG Bunkering, VRS**, ©...

Barges – Ocean Services

NOTATION

(LNG) R

DESCRIPTION

This notation is assigned to a new or existing **LNG** Tank Barge on which the Owner has elected to install a **Re-gasification** facility so that the barge may load and transport LNG and then re-gasify it for direct discharge ashore.

REFERENCES

Subsection 1/3 of the *Guide for Building and Classing LNG Regasification Vessels*

REMARKS

This notation is optional.

Example – ✕ A1, Liquefied Gas Tank Barge, **(LNG) R** ...

Barges – Ocean Services

NOTATION

RB

DESCRIPTION

This notation is assigned to barges of any length which have successfully undergone the necessary survey, analysis and repair to enable a barge to continue actively working past its normal life (20-25 years) as required by the ABS *Guide for Rebuilding Vessels Less than 90 Meters (295 Feet) in Length and Barges of Any Length*.

REFERENCES

Subsection 1/1 of the *Guide for Rebuilding Vessels Less than 90 meters (295 feet) in Length and Barges of Any Length*

REMARKS

This notation is optional.

Example – ⚡ A1, Oil Tank Barge, Ⓢ, **RB**...

Barges – Ocean Services

NOTATION

VEC

VEC-L

DESCRIPTION

Vapor Emission Control (**VEC**) – The notation **VEC** is assigned to indicate that an Oil Tank Barge or Fuel Oil Tank Barge is fitted with a vapor emission control system; and that the system is in accordance with the applicable requirements of 5-2-3/7 of the *ABS Rules for Building and Classing Steel Barges* for this notation

Vapor Emission Control-Lightering (**VEC-L**) – The notation **VEC-L** is assigned to indicate that an Oil Tank Barge or Fuel Oil Tank Barge is fitted with a vapor emission control system that is also suitable for use during lightering operations; and that the system is in accordance with the applicable requirements of 5-2-3/7.21 of the *ABS Rules for Building and Classing Steel Barges* for this notation.

REFERENCES

5-2-3/7.1 of the *Rules for Building and Classing Steel Barges*

REMARKS

Where a cargo vapor emission control system is installed, the **VEC** notation is mandatory. The **VEC-L** notation is optional.

Example – ☒ A1, Oil Tank Barge, Ⓢ, **VEC**...

☒ A1, Oil Tank Barge, Ⓢ, **VEC-L**...

Rivers and Intracoastal Services

NOTATION

Barge, River Service

Chemical Tank Barge, River Service (Type I, II & III)

Oil Tank Barge, River Service

Passenger Vessel, River Service

Towing Vessel, River Service

DESCRIPTION

These notations are assigned to vessels (barges, chemical tank barges, oil tank barges, passenger vessels, towing vessels, etc.) in compliance with ABS *Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways*.

REFERENCES

1A-1-2/3 of the *Rules for Conditions of Classification (Part 1A)*

3-2-5/3 of the *Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways*

REMARKS

Assignment of this notation requires Class Committee approval.

These notations are mandatory.

Example – ✘ A1, **Passenger Vessel, River Service**, ⊕, ✘ AMS... or
✘ A1, **Oil Tank Barge, River Service**...

Rivers and Intracoastal Services

NOTATION

Berthed Passenger Vessel, River Service

DESCRIPTION

This notation is assigned to passenger vessels not intended for temporary mooring, in compliance with 3-5-1/1.3 of the *ABS Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways*.

REFERENCES

3-5-1/1.3 of the *Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory when the requirements for anchoring are waived.

Example – ✕ A1, **Berthed Passenger Vessel, River Service**, ✕ AMS...

Rivers and Intracoastal Services

NOTATION

Floating Dry Dock

DESCRIPTION

This notation is to be assigned a floating dry dock over 61 m (200 ft) in length built under the supervision of ABS Surveyors for compliance with the requirements of the ABS *Rules for Building and Classing Steel Floating Dry Docks*.

REFERENCES

1A-6-2/1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Floating Dry Dock**...

Rivers and Intracoastal Services

NOTATION

Towing Vessel (Sub M, River Service)

DESCRIPTION

This notation is assigned to existing and new towing vessels in service on major rivers and connecting intracoastal waterways, which are required to comply with *46 CFR Subchapter M, Inspection of Towing Vessels, Final Rule (Sub M)*, and which have been built to the satisfaction of the ABS Surveyors to the requirements contained in the *ABS Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways (ABS River Rules)* and the *ABS Guide for Building and Classing Subchapter M Towing Vessels*.

REFERENCES

Subsection 1/1 of the *Guide for Building and Classing Subchapter M Towing Vessels*

REMARKS

This notation is mandatory for vessels complying with the alternative requirements contained in the *ABS Guide for Building and Classing Subchapter M Towing Vessels*.

Example – ✘ A1, **Towing Vessel (Sub M, River Service)**, ✘ AMS...

Rivers and Intracoastal Services

NOTATION

Reinforcement A

Reinforcement B

DESCRIPTION

These notations are assigned to vessels with additional protection against contact with locks and river bottom and against other wear and tear damage associated with normal operation with other floating equipment that comply with all of the requirements for reinforcement A or B in 3-2-1/25.3 of the *ABS Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways*.

REFERENCES

3-2-1/25.1 of the *Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways*

REMARKS

These notations are optional.

Example – ☒ A1, Oil Tank Barge, River Service, ⊕, **Reinforcement A...**

☒ A1, Towing Vessel, River Service, ⊕, **Reinforcement B...**

Rivers and Intracoastal Services, (Great Lakes)

NOTATION

Barge, Great Lakes Service

DESCRIPTION

This is a geographical limitation notation for barges built specifically for trading on the Great Lakes and the St. Lawrence Seaway. This notation is assigned to a barge built under the supervision of the ABS Surveyors to the requirements of the *ABS Rules for Building and Classing Steel Barges*, except where these are modified by the requirements contained in the *Great Lakes Bulk Carrier Rules*, or to their equivalent.

REFERENCES

1A-8-2/1 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of this notation requires Class Committee approval unless it is being downgraded from unrestricted service.

This notation is mandatory for barges built to the modified requirements contained in the *ABS Rules for Building and Classing Bulk Carriers for Service on the Great Lakes*.

Example – ✕ A1, Barge, Great Lakes Service...

Rivers and Intracoastal Services, (Great Lakes)

NOTATION

DM

PM

DESCRIPTION

Dual Mode (DM) – This notation will be assigned to tugs, which are in full compliance with the requirements of Part 5C, Chapter 17 of the *ABS Rules for Building and Classing Marine Vessels*, and signifies that the vessels have the dual mode (DM) capabilities, pushing barges in ITB mode and towing barges by hawser in a separate mode. The tug will be classed and distinguished in the *Record* by the notation **⊠ A1 Towing Vessel Great Lakes Service, DM**. Similarly, the barge will be classed and distinguished in the *Record* by appropriate notation followed by **Great Lakes Service, DM**.

The tug and the barge are to be classed as two separate vessels but will be cross-referenced in the *Record*.

Pushing Mode (PM) – This notation will be assigned to tugs, which do not meet the requirements for intact stability during tow as specified in Part 5C, Chapter 17, Section 2 of the *ABS Rules for Building and Classing Marine Vessels*, but do meet the requirements of the rest of the above Rules, and are intended to operate in a pushing mode (PM) only and remain fixed to the barges throughout the voyage under all weather conditions. The tug will be classed and distinguished in the *Record* by the notation **⊠ A1 Towing Vessel Great Lakes Service, PM**.

Similarly, the barge will be classed and distinguished in the *Record* by appropriate notation followed by **Great Lakes Service, PM**.

The tug and the barge are to be classed as two separate vessels but will be cross-referenced in the *Record*.

REFERENCES

DM

1.1.1 and 1.1.3 of the *Requirements for Building and Classing Integrated Tug-Barge (ITB) Combinations Intended to Operate on the Great Lakes*

PM

1.1.2 and 1.1.3 of the *Requirements for Building and Classing Integrated Tug-Barge (ITB) Combinations Intended to Operate on the Great Lakes*

REMARKS

These notations are mandatory.

Example – **⊠ A1, Oil Tank Barge, Great Lakes Service, DM...**

⊠ A1, Tank Barge, Great Lakes Service, PM...

Underwater Vehicles and Systems

NOTATION

Submersible

Passenger Submersible

Lock-out Submersible

Ambient-Pressure X Submersible

Ambient-Pressure X Passenger Submersible

DESCRIPTION

These notations are to be assigned for manned or occasionally manned underwater vehicles, underwater facilities hyperbaric facilities and diving simulators which have been built to the satisfaction of ABS surveyors to the full requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*, or their equivalent where approved by the ABS Classification Committee for the service.

REFERENCES

1A-7-2/1 of the *Rules for Conditions of Classification (Part 1A)*

Subsections 11/2, 12/3, and 13/3 of the *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, **Submersible**...

☒ A1, **Passenger Submersible**...

☒ A1, **Lock-out Submersible**...

☒ A1, **Ambient-Pressure X Submersible**...

☒ A1, **Ambient-Pressure X Passenger Submersible**...

Underwater Vehicles and Systems

NOTATION

Lock-out Submersible G

DESCRIPTION

This notation is assigned to lock-out submersibles operated by the U.S. government and complying with Section 7-11-6 of the *ABS Rules for Survey After Construction (Part 7)*.

REFERENCES

Section 7-11-6 of the *Rules for Survey After Construction (Part 7)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, **Lock-out Submersible G...**

Underwater Vehicles and Systems

NOTATION

Air Diving System (P)

Air Diving System (F)

Mixed Gas Diving System (P)

Mixed Gas Diving System (F)

Saturation Diving System (P)

Saturation Diving System (F)

DESCRIPTION

These notations are to be assigned for manned or occasionally manned components that the system has been built to the satisfaction of the ABS Surveyors to the full requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities (UWVS Rules)*, or their equivalent.

REFERENCES

1A-7-2/3 of the *Rules for Conditions of Classification (Part 1A)*

Subsection 14/2 of the *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – **⊗ A1, Air Diving System (P)...**

⊗ A1, Air Diving System (F)...

⊗ A1, Mixed Gas Diving System (P)...

⊗ A1, Mixed Gas Diving System (F)...

⊗ A1, Saturation Diving System (P)...

⊗ A1, Saturation Diving System (F)...

Underwater Vehicles and Systems

NOTATION

Diving Bell

Dive Control Station

Handling System

DESCRIPTION

These notations are to be assigned to underwater vehicles and underwater support components which have been built to the satisfaction of ABS surveyors to the full requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*, or their equivalent.

REFERENCES

1A-7-2/5 of the *Rules for Conditions of Classification (Part 1A)*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory for support components used with classed systems.

Example – ☒ **Diving Bell...**

☒ **Dive Control Station ...**

☒ **Handling System...**

Underwater Vehicles and Systems

NOTATION

Hyperbaric Facility

Hyperbaric Diving Simulator

Hyperbaric Reception Facility

DESCRIPTION

Hyperbaric Facility – This notation is assigned to hyperbaric facilities that are built under ABS survey and meet the requirements of Subsections 15/3 and 15/4 of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Hyperbaric Diving Simulator – This notation is assigned to hyperbaric diving simulators that are built under ABS survey and meet the requirements of Subsections 15/3, 15/4 and 15/5 of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Hyperbaric Reception Facility – This notation is assigned to hyperbaric reception facilities that are built under ABS survey and meet the requirements of Subsections 15/3, 15/4 and 15/6 of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

REFERENCES

Subsection 15/2 of the *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, **Hyperbaric Facility**...

☒ A1, **Hyperbaric Diving Simulator** ...

☒ A1, **Hyperbaric Reception Facility** ...

Underwater Vehicles and Systems

NOTATION

ADS

ADS System

DESCRIPTION

Atmospheric Diving Suit (ADS) – The notation **ADS** is assigned to an anthropomorphic, single person suit with muscle powered articulated arms that is capable of withstanding external pressure and is designed for functions such as underwater observation, intervention, survey, inspection or other tasks, and is built to the requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Atmospheric Diving Suit System (ADS System) – The notation **ADS System** is assigned to an ADS and associated support components/systems such as support stands, access and service platforms, the handling system and the ADS control station, which are built to the requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

REFERENCES

Subsections 16/3 and 16/5 of the *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, **ADS**...

☒ A1, **ADS System**...

Underwater Vehicles and Systems

NOTATION

Underwater Habitat

Underwater Complex

DESCRIPTION

These notations are to be assigned for underwater habitats and complexes that incorporate Pressure Vessels for Human Occupancy (PVHO) type which have been built to the satisfaction of ABS surveyors to the full requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*, or their equivalent where approved by the ABS Classification Committee for the service.

REFERENCES

1A-7-2/1 and 1A-7-2/3 of the *Rules for Conditions of Classification (Part 1A)*

Subsection 17/3 of the *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, **Underwater Habitat...**

☒ A1, **Underwater Complex...**

Underwater Vehicles and Systems

NOTATION

ROV, Class X

HROV, Class X

ROV System, Class X

DESCRIPTION

The following Class Notations are available for the Classification of Class III and IV ROVs or HROVs and their associated equipment.

Remotely Operated Vehicle (ROV, Class X) – The notation **ROV, Class X** is assigned to a tethered unmanned unit designed for functions such as underwater observation, survey, inspection, construction, intervention or other tasks, built to the requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Hybrid Remotely Operated Vehicle (HROV, Class X) – The notation **HROV, Class X** is assigned to a hybrid unit that incorporates features of both ROVs and AUVs and can be operated in either ROV mode or AUV mode, built to the requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Remotely Operated Vehicle System (ROV System, Class X) – The notation **(ROV System, Class X)** is assigned to an ROV and associated support systems such as the handling system and ROV control station, which are built to the requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Note: “X” represents the Roman numerals “III or IV”, depending on the category of the ROV:

- Class III Work Class Vehicles
- Class IV Seabed-working Vehicles

REFERENCES

Subsection 18/9 of the *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, **ROV, Class III**...

☒ A1, **HROV, Class IV**...

☒ A1, **ROV System, Class IV**...

Underwater Vehicles and Systems

NOTATION

AUV, X

HAUV, X

DESCRIPTION

The following Class Notations are available for Large and Extra Large AUVs or HAUVs and their associated Equipment.

Autonomous Underwater Vehicle (AUV) – The notation **AUV, X** is assigned to an unmanned untethered unit, designed to operate autonomously and carry out functions such as underwater observation, survey, inspection, intervention or other tasks, built to the requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Hybrid Autonomous Underwater Vehicle (HAUV) – The notation **HAUV, X** is assigned to a hybrid unit that incorporates features of both AUVs and ROVs and can be operated in either AUV mode or ROV mode, built to the requirements of the *ABS Rules for Underwater Vehicles, Systems and Hyperbaric Facilities*.

Note: “X” represents the AUV categories "Large" or "Extra Large":

REFERENCES

Subsections 19/9 of the *Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ✘ A1, **AUV, Extra Large...**

✘ A1, **HAUV, Large ...**

Offshore Services

NOTATION

Accommodation Service

DESCRIPTION

This notation is to be assigned to a mobile offshore unit primarily intended for the accommodation of more than 36 persons who are industrial personnel, engaged in some aspect of offshore or related employment, excluding members of the crew. It denotes accommodation units designed and built in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

Class notation **Ⓟ**, as defined in 2/3.5 of the *ABS Requirements for Position Mooring Systems*, is required for accommodation units with the anchoring arrangement as sole means of position keeping (i.e., DP system is not installed or does not have the required redundancy).

REFERENCES

8-3-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **Ⓟ** A1, Column-Stabilized Unit, **Accommodation Service...**

Offshore Services

NOTATION

Barge Drilling Unit

DESCRIPTION

This notation is to be assigned to barge type, displacement hull offshore drilling units without propulsion machinery. It denotes barge designed and built under ABS survey in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

- 1B-2-2/3.5.2 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*
- 3-1-1/3.5.2 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.
This notation is mandatory.

Example – ✕ A1, **Barge Drilling Unit...**

Offshore Services

NOTATION

Cable Laying Service

DESCRIPTION

This notation is to be assigned to a mobile offshore unit primarily intended for subsea cable installation. It denotes cable laying units designed and built in accordance with the ABS *Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

8-7-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Column-Stabilized Unit, **Cable Laying Service**...

Offshore Services

NOTATION

Column-Stabilized Drilling Unit

DESCRIPTION

This notation is assigned to a mobile offshore structure that depends upon the buoyancy of columns for floatation and stability for all afloat modes of operation or raising and lowering the unit. It denotes unit designed and built under ABS survey in accordance with the ABS *Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

1B-2-2/3.3 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

8-2-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Column-Stabilized Drilling Unit...**

Offshore Services

NOTATION

Column-Stabilized Unit

DESCRIPTION

This notation is assigned to a mobile offshore structure capable of engaging in offshore operations other than drilling, production, storage, or handling of hydrocarbons that depends upon the buoyancy of columns for floatation and stability for all afloat modes of operation or raising and lowering the unit. It denotes unit designed and built under ABS survey in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

- 1B-2-2/1.3 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*
- 3-1-1/3.3 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ☒ A1, **Column-Stabilized Unit**...

Offshore Services

NOTATION

Construction and Maintenance Service

DESCRIPTION

This notation is to be assigned to a mobile offshore unit primarily intended for construction and maintenance activities in support of offshore mineral exploration and production operations. It denotes construction and maintenance units designed and built in accordance with the ABS *Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

8-5-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Self-Elevating Unit, **Construction and Maintenance Service...**

Offshore Services

NOTATION

Crane Service

DESCRIPTION

This notation is to be assigned to a mobile offshore unit primarily intended for the lifting of heavy loads in oil drilling and production operations, offshore construction and/or salvage operations, with a lifting capacity of 160 metric tons and above. It denotes crane units designed and built in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

8-4-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Column-Stabilized Unit, **Crane Service**...

Offshore Services

NOTATION

Drilling Tender

DESCRIPTION

This notation is to be assigned to a mobile offshore unit primarily intended as support to an offshore drilling platform. It may contain the power supply, circulating pumps (connected to the platform by hoses) and storage tanks, drill pipe racks, casing, cement, storage space, living quarters and generally, helicopter landing platform. It denotes drilling tenders designed and built in accordance with the ABS *Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

8-6-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Self-Elevating Unit, **Drilling Tender**...

Offshore Services

NOTATION

Drillship

DESCRIPTION

This notation is to be assigned to ship type, displacement hull offshore drilling units equipped with propulsion machinery. It denotes unit designed and built under ABS survey in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

1B-2-2/3.5.1 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*
1/1.1 of the *Guide for Building and Classing Drillships*

REMARKS

Assignment of this notation requires Class Committee approval.
This notation is mandatory.

Example – ✕ A1, **Drillship**, ✕ AMS...

Offshore Services

NOTATION

Electrical Service Platform (Offshore Installation)

Electrical Service Platform (*hull type*)

OSS

DESCRIPTION

The **✘ A1 Electrical Service Platform (Offshore Installation)** notation may be assigned to bottom-founded, site-specific electrical service platforms complying with the requirements in Section 1 through Section 4, parts of Section 5 (as referenced in 1/4.3), and Section 6 of the *ABS Requirements for Offshore Substations and Electrical Service Platforms*.

The **✘ A1 Electrical Service Platform (*Hull Type*)** notation may be assigned to floating, site-specific electrical service platforms complying with the requirements in Section 1 through Section 4, parts of Section 5 (as referenced in 1/4.3), and Section 6 of the *ABS Requirements for Offshore Substations and Electrical Service Platforms*.

The service notation will be appended by one of the following **(Ship-Type)**, **(Column-Stabilized)**, **(Tension Leg)**, or **(Spar-type)** to indicate the hull type.

The **OSS** notation may be assigned to the power supply, transmission, battery systems and distribution equipment installed on an Electrical Service Platform solely intended for the installation's function as an offshore Substation in compliance with the applicable requirements in 1/4.1 and Section 5 of the *ABS Requirements for Offshore Substations and Electrical Service Platforms*.

REFERENCES

Subsection 1/4 of the *Requirements for Offshore Substations and Electrical Service Platforms*

REMARKS

Assignment of these notations requires Class Committee approval.

The **Electrical Service Platform (Offshore Installation)** and **Electrical Service Platform (*Hull Type*)** notations are mandatory. The **OSS** notation is optional.

- Example –
- ✘ A1, **Electrical Service Platform (Offshore Installation)**...
 - ✘ A1, **Electrical Service Platform (Offshore Installation), OSS**...
 - ✘ A1, **Electrical Service Platform (Ship-Type)**...
 - ✘ A1, **Electrical Service Platform (Ship-Type), OSS**...
 - ✘ A1, **Electrical Service Platform (Column-Stabilized)**...
 - ✘ A1, **Electrical Service Platform (Column-Stabilized), OSS**...
 - ✘ A1, **Electrical Service Platform (Tension Leg)**...
 - ✘ A1, **Electrical Service Platform (Tension Leg), OSS**...
 - ✘ A1, **Electrical Service Platform (Spar-type)**...
 - ✘ A1, **Electrical Service Platform (Spar-type), OSS**...

Offshore Services

NOTATION

Floating Offshore Installation (*hull type*)

DESCRIPTION

This notation is assigned where an installation is fitted with production facilities, but classification of the topside production facilities is not requested, and certain systems and equipment for the production facilities are in compliance with 4-1-1/3 of the ABS *Rules for Building and Classing Floating Production Installations*. This notation will also be assigned where an installation is fitted with production facilities, but the optional classification of the topside production facilities is not requested, but the essential safety features of the production facilities in compliance with 4-1-1/5 are approved by ABS. The installation will be classed and distinguished in the *Record* by the symbol **⊠ A1** followed by the notation **Floating Offshore Installation (*hull type*)**, provided the installation and position mooring system comply with the applicable requirements and the topside structures and modules comply with Section 5A-1-5, 5B-1-2/1.3, 5B-3-3/5.3, 5B-2-3/5.1 or 5B-2-3/5.3 of the ABS *Rules for Building and Classing Floating Production Installations*, as appropriate. The shipboard systems, including the electrical system circuit protection for the production facilities and production fire fighting equipment, are to be reviewed by ABS for the classification of the installation.

REFERENCES

1-1-2/3.5 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory, unless an optional notation that covers a greater scope is selected.

Example – **⊠ A1, Floating Offshore Installation (TLP)...**

Offshore Services

NOTATION

Floating Production, Storage and Offloading System (*hull type*)

DESCRIPTION

This notation is assigned to cover the hull structure of ship type displacement hull designed, (and other hull configurations), equipment, and the marine machinery, position mooring system, and production facility of an installation that processes, stores and offloads hydrocarbons.

This notation covers the following components:

- i) *Floating Production Installation*, including hull structure, applicable marine systems and associated equipment and machinery, safety systems and associated equipment, life saving appliances machinery, subject to the requirements of the *ABS Rules for Building and Classing Floating Production Installations*.
- ii) *Position Mooring System* according to the requirements of the *ABS Rules for Building and Classing Floating Production Installations*.
- iii) *Topside Production Facilities* according to the requirements of the *ABS Rules for Building and Classing Facilities on Offshore Installations* and the *ABS Rules for Building and Classing Floating Production Installations*.

The service notation will be appended by one of the following **(Ship-Type)**, **(Column-Stabilized)**, **(TLP)**, or **(SPAR)** to indicate the hull type. The hull structural configurations of these installations are described in Section 3-1-2 of the *ABS Rules for Building and Classing Floating Production Installations*.

REFERENCES

1-3/5.1 of the *Rules for Building and Classing Facilities on Offshore Installations*

1-1-2/3.1 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, **Floating Production, Storage and Offloading System (Ship-Type)**, ✕ AMS...

Offshore Services

NOTATION

Floating Production (and Offloading) System (*hull type*)

DESCRIPTION

This notation is assigned to cover the hull structure of ship type displacement hull designed, (and other hull configurations), equipment, and the marine machinery, position mooring system, and production facility of an installation that processes and offloads hydrocarbons without storage capacity.

This notation covers the following components:

- i) *Floating Production Installation*, including hull structure, applicable marine systems and associated equipment and machinery, safety systems and associated equipment, life saving appliances machinery, subject to the requirements of the *ABS Rules for Building and Classing Floating Production Installations*.
- ii) *Position Mooring System* according to the requirements of the *ABS Rules for Building and Classing Floating Production Installations*.
- iii) *Topside Production Facilities* according to the requirements of the *ABS Rules for Building and Classing Facilities on Offshore Installations* and the *ABS Rules for Building and Classing Floating Production Installations*.

The service notation will be appended by one of the following **(Ship-Type)**, **(Column-Stabilized)**, **(TLP)**, or **(SPAR)** to indicate the hull type. The hull structural configurations of these installations are described in Section 3-1-2 of the *ABS Rules for Building and Classing Floating Production Installations*.

REFERENCES

1-3/5.1 of the *Rules for Building and Classing Facilities on Offshore Installations*

1-1-2/3.1 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, **Floating Production, (and Offloading) System (Column-Stabilized)**...

Offshore Services

NOTATION

Floating Storage and Offloading System (*hull type*)

DESCRIPTION

This notation is assigned to cover the hull structure of ship type displacement hull designed, (and other hull configurations), equipment, and the marine machinery, position mooring system, and production facility of an installation that stores and offloads hydrocarbons without hydrocarbon processing facilities. An FSO receives oil from a nearby installation that contains processing equipment. FSOs should not connect directly to a well.

This notation covers the following components:

- i) *Floating Production Installation*, including hull structure, applicable marine systems and associated equipment and machinery, safety systems and associated equipment, life saving appliances machinery, subject to the requirements of the *ABS Rules for Building and Classing Floating Production Installations*.
- ii) *Position Mooring System* according to the requirements of the *ABS Rules for Building and Classing Floating Production Installations*.
- iii) *Topside Production Facilities* according to the requirements of the *ABS Rules for Building and Classing Facilities on Offshore Installations* and the *ABS Rules for Building and Classing Floating Production Installations*.

The service notation will be appended by one of the following **(Ship-Type)**, **(Column-Stabilized)**, **(TLP)**, or **(SPAR)** to indicate the hull type. The hull structural configurations of these installations are described in Section 3-1-2 of the *ABS Rules for Building and Classing Floating Production Installations*.

REFERENCES

1-3/5.1 of the *Rules for Building and Classing Facilities on Offshore Installations*

1-1-2/3.1 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, **Floating Storage and Offloading System (Ship-Type)**...

Offshore Services

NOTATION

(Ship-Type)

(Column-Stabilized)

(TLP)

(SPAR)

DESCRIPTION

These notations are appended to the service notations **Floating Production, Storage and Offloading System**, **Floating Production (and Offloading) System**, and **Floating Storage and Offloading System** to indicate the hull type. They are defined as follows:

(Ship-Type) – Ship-type installations are single displacement hulls, either ship-shaped or barge-shaped, which have been designed or converted to a floating production and/or storage system. They may have propulsion machinery and/or station keeping systems.

(Column-Stabilized) – Column-stabilized installations consist of surface piercing columns, submerged pontoons and a deck supported at column tops. Buoyancy is provided by the submerged pontoons, surface piercing columns and braces, if any.

(TLP) – Tension leg platform (TLP) installations are vertically moored, buoyant structural systems wherein the excess buoyancy of the platform maintains tension in the mooring system. The TLPs consist of buoyant pontoons and columns, a column top frame or a topside deck and a tendon system with its seafloor foundations.

(SPAR) – Spar installations are deep draft, vertical floating structures, usually of cylindrical shape, supporting a topside deck and moored to the seafloor. The hull can be divided into upper hull, mid-section and lower hull.

REFERENCES

1-1-2/3.1 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – ☒ A1, Floating Production, Storage and Offloading System (**Column-Stabilized**),
☒ AMS...

Offshore Services

NOTATION

Liftboat

DESCRIPTION

This notation is assigned to liftboats which have been built to the satisfaction of the ABS Surveyor, to the full requirements of the ABS *Guide for Building and Classing Liftboats*, or equivalent.

REFERENCES

1-1-2/1 of the *Guide for Building and Classing Liftboats*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for liftboats built to the requirements contained in the ABS *Guide for Building and Classing Liftboats*.

Example – ✕ A1, **Liftboat**, ✕ AMS...

Offshore Services

NOTATION

Offshore Installation

Offshore Installation – Hydrocarbon Processing

Offshore Installation – Hydrocarbon Production

Offshore Installation – Electric Generating Plant (*electric generating plant-export load*)

Offshore Installation – Offshore Pipelines

Offshore Installation – Offshore Risers

Offshore Installation – Chemical Processing

Offshore Installation – Metals/Ore Processing

DESCRIPTION

The **⊠ A1 Offshore Installation** notation is assigned to Offshore Installations that have been built to the satisfaction of the ABS Surveyors, to the requirements as contained in the *ABS Rules for Building and Classing Offshore Installations*.

Offshore Installations that have been built to the satisfaction of the ABS Surveyors, to the requirements as contained in the *ABS Rules for Building and Classing Facilities on Offshore Installations*, the *ABS Guide for Building and Classing Subsea Pipeline Systems* and/or the *ABS Guide for Building and Classing Subsea Riser Systems*. When approved by the Committee, installations will be classed and distinguished in the *Record* by the symbols **⊠ A1 Offshore Installation** followed by the appropriate notation as shown above.

REFERENCES

1-1-2/1 of the *Rules for Building and Classing Offshore Installations*

1-2/5.3 of the *Rules for Building and Classing Facilities on Offshore Installations*

1-2/1 of the *Guide for Building and Classing Subsea Pipeline Systems*

1-2/1 of the *Guide for Building and Classing Subsea Riser Systems*

REMARKS

Assignment of these notations requires Class Committee approval.

The **Offshore Installation** and **Offshore Installation – Offshore Pipelines** notations are mandatory. The other notations are optional.

Example – **⊠ A1, Offshore Installation...** or

⊠ A1, Offshore Installation – Hydrocarbon Processing...

Offshore Services

NOTATION

Offshore Installation (Self-Installing Unit)

DESCRIPTION

The designation **(Self-Installing Unit)** can be added to the primary Class notation **✕ A1 Offshore Installation** when machinery and safety systems are included within the scope of classification by applying criteria contained in the *ABS Rules for Building and Classing Mobile Offshore Units (MOU Rules)*. Where a Self-Installing Unit is fitted with processing facilities, but classification of the entire processing facilities is not desired, certain essential safety systems and equipment for the processing facilities as indicated in 2/1.1 of the *ABS Requirements for Building and Classing Self-Elevating Units Intended to Operate as Offshore Installations* are to be in compliance with requirements of the *ABS Rules for Building and Classing Facilities on Offshore Installations (Facilities Rules)*.

REFERENCES

1-1-2/7.5 of the *Rules for Building and Classing Offshore Installations*

Subsection 2/1 of the *Requirements for Building and Classing Self-Elevating Units Intended to Operate as Offshore Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – **✕ A1, Offshore Installation (Self-Installing Unit) (S) Gulf of Mexico...**

✕ A1, Offshore Installation (Self-Installing Unit) – Hydrocarbon Processing (S) Gulf of Mexico ...

Offshore Services

NOTATION

Offshore Liquefied Gas Terminal

F	Floating
G	Gravity Based
L	Liquefaction Facility
O	Transfer of LNG (Offloading/Loading)
P	Gas Processing Facility
R	Re-Gasification Facility
S	Storage Facility
T	Terminal with processing facilities which are not classed

DESCRIPTION

These notations are assigned to offshore liquefied gas terminals that have been built, installed and commissioned to the satisfaction of the ABS Surveyors to the full requirements of the *ABS Guide for Building and Classing Floating Offshore Liquefied Gas Terminals* or *ABS Guide for Building and Classing Gravity-Based Offshore LNG Terminals*, where approved by the Committee for service for the specified design environmental conditions. Accordingly, such systems will be classed and distinguished in the *ABS Record* by the symbol **⊗ A1**, followed by **Offshore Liquefied Gas Terminal** and the appropriate notation for the intended service, as listed above. Class notations were chosen to provide a clear description of the function of each configuration using the above symbols.

These notations are also assigned to offshore installations where an LNG processing facility is installed on the unit.

REFERENCES

2-1/1.1 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

2-1/1.1 of the *Guide for Building and Classing Gravity-Based Offshore LNG Terminals*

Subsection 2/1 of the *Requirements for Building and Classing Self-Elevating Units Intended to Operate as Offshore Installations*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory.

Example – **⊗ A1, Offshore Liquefied Gas Terminal F(LNG) PLSO**

⊗ A1, Offshore Liquefied Gas Terminal F(LPG) PLSO

⊗ A1, Offshore Liquefied Gas Terminal F(LNG/LPG) PLSO

Floating Terminals with Gas Processing and Production, Liquefaction, Storage and Offloading – The floating terminal receives well gas, processes it, liquefies the gas and condensate for storage and offloading.

☒ A1, **Offshore Liquefied Gas Terminal F(LNG) ORS**

☒ A1, **Offshore Liquefied Gas Terminal F(LPG) ORS**

☒ A1, **Offshore Liquefied Gas Terminal F(LNG/LPG) ORS**

Floating Storage Terminals with Re-Gasification Facility – The terminal receives LNG or LPG from a trading LNG carrier, stores it, re-gasifies and discharges the gas ashore.

☒ A1, **Offshore Liquefied Gas Terminal F(LNG) SO**

☒ A1, **Offshore Liquefied Gas Terminal F(LPG) SO**

☒ A1, **Offshore Liquefied Gas Terminal F(LNG/LPG) SO**

Floating Storage and Offloading Terminals – The terminal receives, stores, and offloads LNG or LPG in a lightering operation.

☒ A1, **Offshore Liquefied Gas Terminal F(LNG) T**

☒ A1, **Offshore Liquefied Gas Terminal F(LPG) T**

☒ A1, **Offshore Liquefied Gas Terminal F(LNG/LPG) T**

Floating Terminals with processing facilities which are not classed.

☒ A1, **Offshore Liquefied Gas Terminal G(LNG) PLSO**

Gravity-Based LNG Terminals with Gas Processing and Production, Liquefaction, Storage and Offloading – The floating terminal receives well gas, processes it, liquefies the natural gas and condensate for storage and offloading.

☒ A1, **Offshore Liquefied Gas Terminal G(LNG) ORS**

Gravity-Based LNG Storage Terminals with Re-Gasification Facility – The terminal receives LNG from a trading LNG carrier, stores it, re-gasifies and discharges the gas ashore.

☒ A1, **Offshore Liquefied Gas Terminal G(LNG) SO**

Gravity-Based LNG Storage and Offloading Terminals – The terminal receives, stores, and offloads LNG in a lightering operation.

☒ A1, **Offshore Liquefied Gas Terminal G(LNG) T**

Gravity-Based LNG Terminals with processing facilities which are not classed.

☒ A1, Offshore Installation – Hydrocarbon Production, ☒ **Offshore Liquefied Gas Terminal G(LNG) T, (S) Gulf of Mexico ...**

☒ A1, Offshore Installation (Self-Installing Unit), ☒ **Offshore Liquefied Gas Terminal G(LNG) T, (S) Gulf of Mexico...**

☒ A1, Offshore Installation (Self-Installing Unit) – Hydrocarbon Production,

☒ **Offshore Liquefied Gas Terminal G(LNG) T, (S) Gulf of Mexico ...**

Offshore installations where an LNG processing facility is installed on the unit.

Offshore Services

NOTATION

Offshore Wind Turbine (Bottom-Founded)

RNA

DESCRIPTION

The **A1 Offshore Wind Turbine (Bottom-Founded)** notation is assigned to Offshore Wind Turbines that have been built and constructed to the satisfaction of the ABS Surveyors, to the requirements as contained in the *ABS Guide for Building and Classing Bottom-Founded Offshore Wind Turbines*.

The **RNA** notation is assigned to Offshore Wind Turbines with Rotor Nacelle Assemblies and towers in compliance with the requirements of the ABS Type Approval requirements of the *ABS Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)* and the site-specific assessment demonstrates, as a minimum, that loads and deflections calculated for the Bottom-founded Offshore Wind Turbine under the site-specific conditions do not exceed those calculated for the RNA and the tower approved by the ABS Type Approval.

REFERENCES

1-1/3.1 and 1-1/5.1 of the *Guide for Building and Classing Bottom-Founded Offshore Wind Turbines*

REMARKS

Assignment of the **Offshore Wind Turbine (Bottom Founded)** notation requires Class Committee approval.

The **A1 Offshore Wind Turbine (Bottom-Founded)** notation is mandatory. The **RNA** notation is optional

Example – **A1, Offshore Wind Turbine (Bottom-Founded)**...

Offshore Services

NOTATION

Offshore Wind Turbine (Floating)

RNA

DESCRIPTION

The **A1 Offshore Wind Turbine (Floating)** notation is assigned to Offshore Wind Turbines that have been built and constructed to the satisfaction of the ABS Surveyors, to the requirements as contained in the *ABS Guide for Building and Classing Floating Offshore Wind Turbines*.

The **RNA** notation is assigned to Offshore Wind Turbines with Rotor Nacelle Assemblies and towers in compliance with the requirements of the ABS Type Approval requirements of the *ABS Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)* and the site-specific assessment demonstrates, as a minimum, that loads and deflections calculated for the Floating Offshore Wind Turbine under the site-specific conditions do not exceed those calculated for the RNA and the tower approved by the ABS Type Approval.

REFERENCES

1-1/5.1 and 1-1/7.1 of the *Guide for Building and Classing Floating Offshore Wind Turbines*

REMARKS

Assignment of the **Offshore Wind Turbine (Floating)** notation requires Class Committee approval. The **Offshore Wind Turbine (Floating)** notation is mandatory. The **RNA** notation is optional

Example – **A1, Offshore Wind Turbine (Floating)**...

Offshore Services

NOTATION

Pipe Laying Service

DESCRIPTION

This notation is to be assigned to a mobile offshore unit primarily intended for subsea pipeline installation. It denotes pipe laying units designed and built in accordance with the ABS *Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

8-7-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Column-Stabilized Unit, **Pipe Laying Service...**

Offshore Services

NOTATION

Self-Elevating Drilling Unit

DESCRIPTION

This notation is assigned to units having a hull with sufficient buoyancy to transport the unit to the desired location, to raise the hull to a pre-determined elevation above the sea surface with its legs supported at the seabed. It denotes unit designed and built under ABS survey in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

1B-2-2/3.1 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

8-2-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Self-Elevating Drilling Unit...**

Offshore Services

NOTATION

Self-Elevating Unit

DESCRIPTION

This notation is assigned to units capable of engaging in offshore operations other than drilling, production, storage, or handling of hydrocarbons having a hull with sufficient buoyancy to transport the unit to the desired location, to raise the hull to a pre-determined elevation above the sea surface with its legs supported at the seabed. It denotes unit designed and built under ABS survey in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

1B-2-2/1.1 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

3-1-1/3.1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, **Self-Elevating Unit**...

Offshore Services

NOTATION

Single Point Mooring

Single Point Mooring (excl. PLEM)

DESCRIPTION

Single Point Mooring – The notation is assigned to a system which provides temporary offshore mooring to a variety of visiting vessels by means of a hawser or yoke from the buoy or fixed tower.

Single Point Mooring (excl. PLEM) – This notation is assigned to a single point mooring for which the Pipeline End Manifold, PLEM, (or similar equipment) associated with the SPM is exempted from the scope of Classification. The manner used to control the flow of fluid between a subsea pipeline and the visiting vessel is to be fully described in documentation provided to ABS when requesting this exemption.

REFERENCES

1-1-2/1.1 and 1-1-2/1.3 of the *Rules for Building and Classing Single Point Moorings*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are mandatory. The most appropriate notation is to be assigned based on the scope of class.

Example – ☒ A1, **Single Point Mooring**...

Example – ☒ A1, **Single Point Mooring (excl. PLEM)**...

Offshore Services

NOTATION

Spaceport (Recovery) (*hull type*)

Spaceport (Launch) (*hull type*)

Spaceport (Recovery, Launch) (*hull type*)

DESCRIPTION

These notations are assigned to offshore spaceports that have been built and constructed to the satisfaction of the ABS Surveyors, to the requirements as contained in the *ABS Requirements for Building and Classing Offshore Spaceports*.

The service notation will be appended by one of the following **(Barge-Type)**, **(Column-Stabilized)**, **(Offshore Installation)**, or **(Self-Elevating)** to indicate the hull type.

REFERENCES

1/2.2.1 of the *Requirements for Building and Classing Offshore Spaceports*

REMARKS

Assignment of this notation requires Class Committee approval.

These notations are mandatory.

Example – ✘ A1, **Spaceport (Recovery) (Barge-Type)**...

✘ A1, **Spaceport (Recovery, Launch) (Column-Stabilized)**...

✘ A1, **Spaceport (Launch) (Offshore Installation)**...

✘ A1, **Spaceport (Launch) (Self-Elevating)**...

Offshore Services

NOTATION

Subsea Mining (*hull type*)

DESCRIPTION

This notation is assigned to mining units which have been built and constructed to the satisfaction of ABS Surveyors and to the requirements of Sections 1 to 4 and Section 7 of the ABS *Requirements for Subsea Mining* or to their equivalent.

The installation will be classed and distinguished in the *Record* by the symbol **✕ A1** followed by the notation **Subsea Mining (*hull type*)**. The service notation will be appended by one of the following **(Ship-Type)** or **(Column-Stabilized)** to indicate the hull type.

REFERENCES

1/2.2 of the *Requirements for Subsea Mining*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – **✕ A1, Subsea Mining (Ship-Type)...**

✕ A1, Subsea Mining (Column Stabilized)...

Offshore Services

NOTATION

Wind IMR

DESCRIPTION

This notation is to be assigned to a mobile offshore unit primarily intended for the installation, maintenance, and repair of wind turbines, including pile driving, tower installation, and nacelle and blade installation. It denotes Wind Turbine Installation, Maintenance and Repair units designed and built in accordance with the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

8-8-1/1 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory.

Example – ✕ A1, Column-Stabilized Unit, **Wind IMR**...

Offshore Services

NOTATION

Ⓔ*

DESCRIPTION

This notation may be assigned to the anchoring equipment of self-propelled mobile offshore units and liftboats, which meet the alternative requirements in 3-4-1/3.3 of the *Rules for Building and Classing Mobile Offshore Units* or 3-5-1/3.5 of the *Guide for Building and Classing Liftboats*.

REFERENCES

3-4-1/3.3 of the *Rules for Building and Classing Mobile Offshore Units*

3-5-1/3.5 of the *Guide for Building and Classing Liftboats*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, Self-Elevating Drilling Unit, Ⓔ*, ✕ AMS...

✕ A1, Liftboat, Ⓔ*, ✕ AMS...

Offshore Services

NOTATION

ABS MPD

ABS MPD-Ready

DESCRIPTION

The **ABS MPD™** and **ABS MPD-Ready™** notations may be assigned to drilling units in compliance with the *ABS Guide for Classification and Certification of Managed Pressure Drilling Systems* that may or may not be classed with any of ABS' **CDS** notations and sub-notations for the associated drilling systems.

The **ABS MPD** notation may be assigned to drilling units where classification of an installed MPD system is requested by the Owner/Operator and where approved by the Committee for service under the specified design environmental conditions.

The **ABS MPD-Ready** notation may be assigned to drilling units where MPD operations are anticipated, however, operationally-essential MPD equipment is not physically present.

REFERENCES

Subsection 1/5 of the *Guide for Classification and Certification of Managed Pressure Drilling Systems*

REMARKS

Assignment of the **ABS-MPD** notation requires Class Committee approval.

This notation is optional.

Example – ✘ A1, Self Elevating Drilling Unit, ✘ **ABS MPD...**

✘ A1, Self Elevating Drilling Unit, **ABS MPD...**

✘ A1, Self Elevating Drilling Unit, ✘ **ABS MPD-Ready...**

✘ A1, Self Elevating Drilling Unit, **ABS MPD-Ready...**

✘ A1, Self Elevating Drilling Unit, ✘ **CDS(WCS), ✘ ABS MPD...**

✘ A1, Self Elevating Drilling Unit, ✘ **CDS(WCS), ✘ ABS MPD-Ready...**

Offshore Services

NOTATION

☒ AMCC

☒ AMCCU

DESCRIPTION

AMCC – This notation is assigned to the automatic or remote control and monitoring systems for non-propulsion related machinery and systems on offshore floating installations or fixed installations. In particular, where in lieu of manning the machinery space(s) locally, it is intended to control and monitor the machinery/systems under continuous supervision from a local centralized control and monitoring station(s).

AMCCU – This notation is assigned to the automatic or remote control and monitoring systems for non-propulsion related machinery and systems on offshore floating installations or fixed installations. In particular, where it is intended that the machinery space(s) and the local centralized control and monitoring station(s) (if provided) be periodically unmanned, and that the machinery/systems be controlled and monitored from a remote control and monitoring center located outside the machinery space(s).

The Maltese Cross ☒ symbol signifies that the pertinent automatic or remote control and monitoring systems have been assembled, tested and installed under ABS survey.

REFERENCES

1-1/3.1 and 1-1/3.3 of the *Guide for Automatic or Remote Control Monitoring for Machinery and Systems (other than propulsion) on Offshore Installations*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Floating Production, Storage & Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMCC... or

☒ A1, Floating Production, Storage & Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMCCU...

Offshore Services

NOTATION

⊠ AMS-NP

DESCRIPTION

This notation is assigned to machinery and systems for non-self-propelled units that comply with the applicable requirements of Part 4 of the *ABS Rules for Building and Classing Mobile Offshore Units* or their equivalent, as applied to self-propelled units, manufactured and installed under ABS survey and found satisfactory after trials, including propulsion machinery and systems used for short field moves of non-self-propelled units.

REFERENCES

1B-2-2/13 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, Self Elevating Drilling Unit, ⊠ **AMS-NP**...

Offshore Services

NOTATION

BRZ

BRZ+

DESCRIPTION

These notations may be assigned to Floating Offshore Installations operating in Brazilian jurisdictional waters, which are designed and built in accordance with the applicable Brazilian regulatory requirements listed in 1-1-2/Table 1 of the *ABS Rules for Building and Classing Floating Production Installations*.

BRZ – This notation demonstrates compliance with applicable requirements in the documents listed in column “BRZ” of 1-1-2/Table 1.

BRZ+ – This notation demonstrates compliance with applicable requirements in the documents listed in column “BRZ+” of 1-1-2/Table 1.

REFERENCES

1-1-2/5.17 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

These notations are optional.

Example – ✕ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ✕ AMS, **BRZ**...

Example – ✕ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ✕ AMS, **BRZ+**...

Offshore Services

NOTATION

- ☒ CDS
- ☒ CDS(WCS)
- ☒ CDS(DSD)
- ☒ CDS(DSC)
- ☒ CDS(DSP)

DESCRIPTION

This notation is assigned to drilling systems, subsystems, equipment, and/or components that have been built, installed and commissioned to the satisfaction of the Surveyors to the full requirements of the ABS *Guide for the Classification of Drilling Systems*, where approved by the Committee for service for the specified design environmental conditions. The symbol ☒ will be omitted if the drilling systems and equipment, although complying with the Guide, have not been manufactured and installed under ABS survey.

Upon request by the owner, ☒ CDS can be reduced in scope. Following completion of the requirements to change the class scope, the existing ☒ CDS may be exchanged for one or more of the following sub-class designations:

- ☒ CDS(WCS) applies to the classification of well control system including well control equipment hardware and associated control systems.
- ☒ CDS(DSD) applies to the classification of the derrick systems including drawworks, hoisting and drilling and motion compensating systems.
- ☒ CDS(DSC) applies to the classification of the drilling fluid circulating system.
- ☒ CDS(DSP) applies to the classification of the specialized pipe and tubular handling systems.

Note: ☒ CDS(WCS+DSD) class designation would apply where the well control and derrick systems were classed and ☒ CDS(DSC) and ☒ CDS(DSP) were not selected.

REFERENCES

1B-2-2/3.9 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*
Subsection 1/3 of the *Guide for the Classification of Drilling Systems*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Self Elevating Drilling Unit, ☒ CDS... or
☒ A1, Self Elevating Drilling Unit, CDS...
☒ A1, Self Elevating Drilling Unit, ☒ CDS(WCS)...
☒ A1, Self Elevating Drilling Unit, ☒ CDS(DSD)...
☒ A1, Self Elevating Drilling Unit, ☒ CDS(DSC)...
☒ A1, Self Elevating Drilling Unit, ☒ CDS(DSP)...

Offshore Services

NOTATION

⊠ CDS (N)

DESCRIPTION

This notation is assigned to drilling systems and equipment that comply with the ABS *Guide for the Classification of Drilling Systems* and the additional requirements for operation on the Norwegian Continental Shelf contained in the ABS *Guide for Mobile Offshore Units Operating on Norwegian Continental Shelf, N-Notation*.

REFERENCES

1B-2-2/3.9 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

3-1/3 of the *Guide for Mobile Offshore Units Operating on Norwegian Continental Shelf, N-Notation*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ⊠ A1, Self Elevating Drilling Unit, ⊠ CDS (N)...

Offshore Services

NOTATION

(CI) site

DESCRIPTION

This notation is assigned to an existing vessel converted to an FPI, and classed under the provisions of Section 5A-2-1 of the *ABS Rules for Building and Classing Floating Production Installations*: If the existing vessel being converted is currently in ABS class with **☒**, then the **☒** would be maintained for the converted FPI.

For a converted installation where the trading vessel and site-specific environmental data have been used per the *ABS Rules for Building and Classing Floating Production Installations*, the basic notation is followed by the qualifier **(CI)**. The **(CI)** qualifier will be followed by the definition of the site. For example, **(CI) Brazil Santos Basin**.

REFERENCES

1-1-2/3.3 and 1-1-2/5.9.2 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for installations classed using the provisions of Section 5A-2-1 of the *ABS Rules for Building and Classing Floating Production Installations*.

Example – **☒ A1, Floating Production, Storage and Offloading System (Ship-Type) (CI) Brazil Santos Basin, ☒ AMS...**

Offshore Services

NOTATION

☒ CSS – Production

DESCRIPTION

This notation is assigned to subsea production systems that have been reviewed to the satisfaction of ABS as well as built, installed and commissioned to the satisfaction of the ABS Surveyors to the full requirements of the ABS *Guide for Classification and Certification of Subsea Production Systems, Equipment and Components*, where approved by the Committee for service under the specified design environmental conditions.

REFERENCES

1/3.1 of the *Guide for Classification and Certification of Subsea Production Systems, Equipment and Components*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is mandatory for classed assets.

Example – ☒ A1, Floating Production, Storage and Offloading System (Column-Stabilized),
☒ AMS, ☒ **CSS – Production...**

Offshore Services

NOTATION

(Disconnectable)

(Disconnectable-R (from site to designated port))

(Disconnectable-R (from site to geographic area bounded by Lat. X1, Long. Y1; Lat. X2, Long. Y2; Lat. X3, Long. Y3; Lat. X4, Long. Y4))

DESCRIPTION

(Disconnectable) – This notation, together with **✕ AMS** (or **AMS**), is assigned to a floating installation system that has a propulsion system and a means of disengaging the vessel from its mooring and riser systems to allow the vessel to ride out severe weather or seek refuge under its own power for a specified design environmental condition.

(Disconnectable-R (from site to designated port) or (from site to geographic area bounded by Lat. X1, Long. Y1; Lat. X2, Long. Y2; Lat. X3, Long. Y3; Lat. X4, Long. Y4)) – This notation, together with **✕ AMS** (or **AMS**), may be assigned to a Disconnectable floating installation system that is restricted to a specific service area in proximity to its operating site location, where permitted by local authorities or regulations.

REFERENCES

1-1-2/5.1, 3-2-3/3.5 of the *Rules for Building and Classing Floating Production Installations*

2-1/3.1 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

For disconnectable units, it is mandatory that one of these notations to be assigned.

Example – **✕ A1**, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin **(Disconnectable)**, **✕ AMS**...

✕ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, (S100) Gulf of Mexico, **(Disconnectable)**, **✕ AMS**...

Offshore Services

NOTATION

DLA

DLA (S design return period)

DESCRIPTION

Dynamic Loading Approach (DLA) – This notation is assigned to installations where the hull structure has been built to plans reviewed in accordance with the procedure and criteria in the *ABS Guide for “Dynamic Loading Approach” for Floating Production, Storage and Offloading (FPSO) Installations* for calculating and evaluating the behavior of hull structures under dynamic loading conditions, in addition to compliance with other requirements of the Rules.

DLA (S design return period) – The basic notation **DLA** is applied when the hydrodynamic loads have been determined using the wave environment of the North Atlantic as if the installation is a trading vessel with a 20- to 25-year service life. If the wave environment of the intended site is used during the analysis, the notation will include an **S** qualifier, followed by the design return period at the defined site. For example, if the 100-year return period was used, the following may apply: **DLA (S100)**. Transit conditions to the intended site are also to be included in the DLA evaluation.

REFERENCES

1-1-2/5.7 of the *Rules for Building and Classing Floating Production Installations*

2-1/3.7 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

1/1.1.1(b) of the *Guide for Building and Classing Drillships*

REMARKS

This notation is optional.

Example – ☒ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMS, **DLA**...

☒ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMS, **DLA (S100)**...

☒ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, (S100) Gulf of Mexico, **DLA (S100)**, ☒ AMS...

☒ A1, Drillship, ☒ AMS, **DLA**...

Offshore Services

NOTATION

DOPP

DOPP+

DESCRIPTION

DOPP – This notation is assigned to units with a dropped object prevention program approved in accordance with the requirements and criteria established in Chapter 2 and Chapter 4 of the *ABS Guide for Dropped Object Prevention on Offshore Units and Installations*.

DOPP+ – This notation is assigned to units that comply with **DOPP** and possess equipment designs that meet the requirements for primary securing, secondary retention, and specific equipment securing, and which are approved, surveyed, and commissioned to the satisfaction of the Surveyors in full compliance the *ABS Guide for Dropped Object Prevention on Offshore Units and Installations*.

REFERENCES

1-2/1.1 and 1-2/1.3 of the *Guide for Dropped Object Prevention on Offshore Units and Installations*

REMARKS

These notations are optional.

Example – ☒ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMS, **DOPP** ...

☒ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, S(100) Gulf of Mexico, ☒ AMS, ☒ ACCU, **DOPP+**_...

☒ A1, Drillship, ☒ AMS, **DOPP**...

Offshore Services

NOTATION

EFP-A1

EFP-A2

EFP-A3

EFP-M1

EFP-M2

EFP-IA

DESCRIPTION

EFP-A1 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/3 and have accommodation areas designed, constructed and equipped in accordance with the requirements in 1/5.1.2 as well as the less stringent enhanced requirements of Chapter 2, Section 6 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-A2 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/3 and have accommodation areas designed, constructed and equipped in accordance with the requirements in Chapter 1 as well as Chapter 2, Sections 1 through 5 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-A3 – This notation is assigned to MODUs and offshore installations that meet the criteria in 1-1/5.1.2 and also comply with the additional requirements for accommodation areas in Chapter 2, Section 7 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-M1 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/5.5.2 and also comply with the less stringent enhanced requirements for the machinery spaces in Chapter 3, Section 8 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-M2 – This notation is assigned to vessels, MODUs, MOUs and offshore installations that meet the criteria in 1-1/3 and have the machinery spaces designed, constructed and equipped in accordance with the requirements in Chapter 1 and Chapter 3, Sections 1 through 7 of the *ABS Guide for Enhanced Fire Protection Arrangements*.

EFP-IA – This notation is assigned to MODUs as well as floating and fixed offshore installations that meet the criteria in 1-1/3 and have the industrial area designed, constructed and equipped in accordance with the requirements of Chapters 1 and 5 (excluding the alternate requirements of Chapter 2, Section 6 and Chapter 3, Section 8) of the *ABS Guide for Enhanced Fire Protection Arrangements*.

REFERENCES

1-1/5 of the *Guide for Enhanced Fire Protection Arrangements*

REMARKS

These notations are optional.

Example – ☒ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMS, **EFP-A...**

☒ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMS, **EFP-A+**...

☒ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ☒ AMS, **EFP-M**...

☒ A1, Column-Stabilized Drilling Unit, Ⓢ, ☒ AMS, ☒ ACCU, **EFP-IA**...

Offshore Services

NOTATION

ENVIRO-OS

ENVIRO-OS+

EP2020+

DESCRIPTION

ENVIRO-OS – This notation is assigned to an offshore unit, floating installation, or liftboat complying with the applicable requirements of Annexes I, IV, V, and VI to the International Convention for the Prevention of Pollution from Ships, MARPOL 73/78, as amended and associated ABS requirements which influence environmental protection.

ENVIRO-OS+ – This notation will be assigned to an offshore unit, floating installation, or liftboat complying with applicable requirements of the **ENVIRO-OS** notation and Annexes I, IV, V, and VI to the International Convention for the Prevention of Pollution from Ships, MARPOL 73/78, as amended and the criteria for environmental protection related to design characteristics, management and support systems, sea discharges, and air discharges specified in the *ABS Guide for the Environmental Protection Notation for Offshore Units, Floating Installations, and Liftboats*.

EP2020+ – This notation will be assigned for a refrigeration system where the use of a refrigerant medium exceeds GWP of 2000, provided the refrigerant system complies with all the other conditions and requirements of Subsection 3/19 of the *ABS Guide for the Environmental Protection Notation for Offshore Units, Floating Installations, and Liftboats* for **ENVIRO-OS+** notation. This signifies the owner's commitment to replace the existing refrigerant with one having GWP less than or equal to 2000, by the year 2020.

REFERENCES

1/3.1, 1/3.3, and 4/17.1 of the *Guide for the Environmental Protection Notation for Offshore Units, Floating Installations, and Liftboats*

REMARKS

These notations are optional.

Example – ☒ A1, Liftboat, Ⓢ, ☒ AMS, ☒ ACCU, **ENVIRO-OS**...

☒ A1, Column-Stabilized Drilling Unit, Ⓢ, ☒ AMS, ☒ ACCU, **ENVIRO-OS+**...

☒ A1, Column-Stabilized Drilling Unit, Ⓢ, ☒ AMS, ☒ ACCU, **ENVIRO-OS+**
(EP2020+)...

Offshore Services

NOTATION

FL(number of years), Year

DESCRIPTION

Fatigue Life (FL(number of years), Year) – This is a notation that denotes that only the required fatigue analysis of Appendix 5A-3-A2 of the *ABS Rules for Building and Classing Floating Production Installations* for ship-type installations, 5B-1-2/5, 5B-2-3/5 or 5B-3-3/5 of the *ABS Rules for Building and Classing Floating Production Installations* for non-ship-type installations, or 3-5/7.1 and 3-5/7.3 of the *ABS Guide for Building and Classing Floating Offshore Liquefied Gas Terminals* for floating terminals is performed for either unrestricted service wave environment or the transit and site specific wave environment.

The **(number of years)** refers to the design fatigue life equal to 20 years or more (in 5-year increments), as specified by the applicant. Where different design fatigue life values are specified for different structural elements within the installation, such as hull structure components, hull interface structures and position mooring system components, the **(number of years)** refers to the least of the target values. In the case when spectral fatigue analysis is also applied the least of the fatigue life values calculated by the required fatigue strength analysis for the **FL** notation and the spectral fatigue analysis must satisfy the design fatigue life. The “design fatigue life” refers to the target value set by the applicant, not the value calculated in the analysis.

Year is the year of maturation of fatigue life in the defined site location is assigned.

REFERENCES

1-1-2/5.11.2 of the *Rules for Building and Classing Floating Production Installations*

2-1/3.9.2 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

Assignment of this notation requires Class Committee approval.

These notations are mandatory for new construction installations.

Example – ✕ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, **FL(30), 2041**, ✕ AMS...

✕ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, (S100) Gulf of Mexico, **FL(30), 2041**, ✕ AMS...

Offshore Services

NOTATION

FL(number of years), Year

DESCRIPTION

Fatigue Life (FL(number of years), Year) – This notation will be assigned to identify the design fatigue life in years and the year of maturation of fatigue life in the defined site. The “design fatigue life” refers to the target value set by the owner or designer, not the value calculated in the analysis. The design fatigue life is to be verified to be in compliance with the fatigue criteria in the *Rules for Building and Classing Offshore Installations*, the *Guide for Building and Classing Bottom-Founded Offshore Wind Turbines*, or the *Guide for Building and Classing Floating Offshore Wind Turbines*.

The class notation **FL(number of years), Year** is mandatory to be assigned and published in the ABS *Record*.

REFERENCES

1-1-2/7.3 of the *Rules for Building and Classing Offshore Installations*

1-1/5.3 of the *Guide for Building and Classing Bottom-Founded Offshore Wind Turbines*

1-1/7.5 of the *Guide for Building and Classing Floating Offshore Wind Turbines*

REMARKS

Assignment of this notation requires Class Committee approval.

These notations are mandatory.

Example – ✘ A1, Offshore Installation, **FL(20), 2040...**

✘ A1, Offshore Wind Turbine (Bottom-Founded), **FL(25), 2045...**

✘ A1, Offshore Wind Turbine (Floating), **FL(25), 2045...**

Offshore Services

NOTATION

FLM(number of years), Year

DESCRIPTION

This notation will follow the **FL(number of years), Year**, **RFL(number of years), Year**, or **SFA(number of years), Year** notation.

For New Construction:

Fatigue Life Mooring (FLM(number of years), Year) – This is a notation assigned where different design fatigue life values are specified for structural elements (hull and hull interface structures) and the position mooring system or stationkeeping system within the installation.

The **(number of years)** refers to the design fatigue life for the position mooring system or stationkeeping system.

Year is the year of maturation associated with the position mooring system or stationkeeping system.

The position mooring systems covered by the notation **FLM** refers to all off-the-vessel mooring components, anchor foundation systems, and submerged buoy structure for disconnectable mooring systems. If any of those components has a fatigue life greater than the mooring system indicated in the notation **FLM**, this may be noted in the *Record*. On-the-vessel mooring components and equipment are to have a design fatigue life equal or greater than the structural elements. If the on-the-vessel components fatigue life exceeds the structural elements, this may also be noted in the *Record*.

For Conversions:

Fatigue Life Mooring (FLM(number of years), Year) – This is a notation assigned where different design fatigue life values are specified for structural elements (hull and hull interface structures) and the position mooring system within the installation.

The **(number of years)** refers to the target value of the fatigue life for a new position mooring system.

Year is the year of maturation associated with the new position mooring system.

REFERENCES

1-1-2/5.11.2, 1-1-2/5.11.3, and 1-1-2/5.12.1 of the *Rules for Building and Classing Floating Production Installations*

1-1/7.5 of the *Guide for Building and Classing Floating Offshore Wind Turbines*

2-1/3.9.2 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

- Example –
- ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, FL(30), 2041, **FLM(25), 2036**, ✘ AMS...
 - ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (CI) Brazil Santos Basin, RFL(15), 2018, **FLM(20), 2023**, ✘ AMS...
 - ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ✘ AMS, SFA(30), 2041, **FLM(25), 2036**, ✘ AMS.....
 - ✘ A1, Offshore Wind Turbine (Floating), FL(25), 2045, **FLM(20), 2040**...

Offshore Services

NOTATION

FLM(number of years), Year

DESCRIPTION

Fatigue Life Mooring (FLM(number of years), Year) – This is a notation assigned where design fatigue life values are specified by the applicant for the position mooring system and the design complies with the fatigue requirements of the *ABS Requirements for Position Mooring Systems*.

The **(number of years)** refers to the target value of the fatigue life for a new position mooring system and **Year** refers to the year of maturation associated with the new position mooring system.

REFERENCES

1-1-2/1.1 of the *Rules for Building and Classing Single Point Moorings*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, Single Point Mooring, **FLM(20), 2040...**

Offshore Services

NOTATION

GRC(Type I or II, PS, or AS)

DESCRIPTION

This notation is assigned to a vessel or unit classed by ABS, which has an ABS Register of Offshore Access Gangway Systems permanently installed in compliance with the *ABS Guide for Certification of Offshore Access Gangways*.

Type I – signifies that the gangway system permits unrestricted flow of personnel transfer within the capacity limitation and is supported at both ends

Type II – signifies that the gangway system permits limited flow of personnel transfer

PS – signifies that the vessel or unit has an installed passive motion compensation gangway system designed, constructed, and tested in accordance with the respective requirements of the *ABS Guide for Certification of Offshore Access Gangways*

AS – signifies that the vessel or unit has an installed active or full active motion compensation gangway system designed, constructed, and tested in accordance with the respective requirements of the *ABS Guide for Certification of Offshore Access Gangways*

In the case of a vessel with more than one gangway, separate reviews and surveys for each gangway will be required, and multiple gangway systems are to be included in the notation.

REFERENCES

Subsection 1/7 of the *Guide for Certification of Offshore Access Gangways*

REMARKS

These notations are optional.

Example – ☒ A1, Column-Stabilized Unit, Accommodation Service, **GRC(Type I-PS)**...

☒ A1, Column-Stabilized Unit, Accommodation Service, **GRC(Type I-AS), GRC(Type II-PS)**...

Offshore Services

NOTATION

HAB(MODU)

HAB+(MODU)

HAB++(MODU)

DESCRIPTION

HAB(MODU) – This notation is assigned to vessels (drillships, drill barges, self-elevating drilling units (SEDUs), column stabilized drilling units (CSDUs), or any other vessel used for the purposes of drilling) which comply with the minimum criteria for personnel accommodation area design, whole-body vibration (separate criteria for accommodation areas and work spaces), noise, indoor climate and lighting as included in the *ABS Guide for Crew Habitability on Mobile Offshore Drilling Units*.

HAB+(MODU) – This notation is assigned to vessels (drillships, drill barges, self-elevating drilling units (SEDUs), column stabilized drilling units (CSDUs), or any other vessel used for the purposes of drilling) which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration, and noise aimed at increasing personnel comfort and safety as included in the *ABS Guide for Crew Habitability on Mobile Offshore Drilling Units*.

HAB++(MODU) – This notation is assigned to vessels (drillships, drill barges, self-elevating drilling units (SEDUs), column stabilized drilling units (CSDUs), or any other vessel used for the purposes of drilling) which comply with more stringent habitability criteria with respect to whole-body vibration, noise, and indoor climate as included in the *ABS Guide for Crew Habitability on Mobile Offshore Drilling Units*.

REFERENCES

Subsection 1/6 of the *Guide for Crew Habitability on Mobile Offshore Drilling Units*

REMARKS

These notations are optional.

Example – ☒ A1, Column Stabilized Drilling Unit, Ⓜ, ☒ AMS, **HAB(MODU)**...
☒ A1, Column Stabilized Drilling Unit, Ⓜ, ☒ AMS, **HAB+(MODU)**...
☒ A1, Column Stabilized Drilling Unit, Ⓜ, ☒ AMS, **HAB++(MODU)**...

Offshore Services

NOTATION

HAB(OS)

HAB+(OS)

HAB++(OS)

DESCRIPTION

HAB(OS) – This notation is assigned to installations (tension leg platforms (TLPs), floating production, storage and offloading (FPSOs), floating, storage and offloading (FSOs), spars or any other buoyant or non-buoyant structure supported by or attached to the seafloor) which comply with the minimum criteria for personnel accommodation area design, whole-body vibration (separate criteria for accommodation areas and work spaces), noise, indoor climate and lighting as included in the *ABS Guide for Crew Habitability on Offshore Installations*.

HAB+(OS) – This notation is assigned to installations (tension leg platforms (TLPs), floating production, storage and offloading (FPSOs), floating, storage and offloading (FSOs), spars or any other buoyant or non-buoyant structure supported by or attached to the seafloor) which comply with more stringent habitability criteria with respect to accommodation areas, whole-body vibration, and noise aimed at increasing personnel comfort and safety as included in the *ABS Guide for Crew Habitability on Offshore Installations*.

HAB++(OS) – This notation is assigned to installations (tension leg platforms (TLPs), floating production, storage and offloading (FPSOs), floating, storage and offloading (FSOs), spars or any other buoyant or non-buoyant structure supported by or attached to the seafloor) which comply with more stringent habitability criteria with respect to whole-body vibration, noise, and indoor climate as included in the *ABS Guide for Crew Habitability on Offshore Installations*.

REFERENCES

Subsection 1/6 of the *Guide for Crew Habitability on Offshore Installations*

REMARKS

These notations are optional.

- Example – ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, (M), ✘ AMS, **HAB(OS)**...
- ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, (M), ✘ AMS, **HAB+(OS)**...
- ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, (M), ✘ AMS, **HAB++(OS)**...

Offshore Services

NOTATION

HL(*number of years*)

DESCRIPTION

This is a notation that denotes a floating terminal's structural design life is greater than 20 years and the floating terminal is designed for uninterrupted operation on-site without any drydocking. The nominal design corrosion values (NDCV) of the hull structure are to be increased in accordance with 5A-3-1/1.7 of the *ABS Rules for Building and Classing Floating Production Installations* or 3-2/3.3 of the *ABS Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*. The **(number of years)** refers to the design life greater than 20 years (in 5-year increments) as reflected by the increase in nominal design corrosion values.

REFERENCES

1-1-2/5.11.1 of the *Rules for Building and Classing Floating Production Installations*

2-1/3.9.1 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

This notation is mandatory for installations that have a design life greater than 20 years.

Example – ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, **HL(30)**, ✘ AMS...

✘ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, (S100) Gulf of Mexico, **HL(30)**, ✘ AMS...

Offshore Services

NOTATION

☒ IMP-EXP

☒ IMP

☒ EXP

DESCRIPTION

☒ **IMP-EXP** – This notation is assigned to an installation where the import and export systems are built in full compliance with the requirements of Part 4, Chapter 2 of the *ABS Rules for Building and Classing Floating Production Installations*.

☒ **IMP** or ☒ **EXP** – One of these notations is assigned to an installation when only the import system or the export system, respectively, is built in full compliance with the requirements of Part 4, Chapter 2 of the *ABS Rules for Building and Classing Floating Production Installations*.

REFERENCES

1-1-2/5.5 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

These notations are optional.

Example – ☒ A1, Floating Production, Storage and Offloading System (Column-Stabilized) (S)
Brazil Santos Basin, ☒ AMS, ☒ **IMP-EXP**...

Offshore Services

NOTATION

LE (*number of years*) *year*

DESCRIPTION

Life Extension (**LE**) – For the first life extension up to 5 years, upon agreement with operator/owner, this may be granted instead of **RFL** or **FL** without performing new fatigue analysis as required in Section 1-1-2 of the *ABS Rules for Building and Classing Floating Production Installations*, if the following conditions are to be satisfied:

- Any modifications to the structure have class approval.
- Critical areas of the original design have been re-examined using NDT techniques and verified to be satisfactory by ABS Surveyor.
- Additional items to be determined on a case-by-case basis during the life extension process have been resolved.

REFERENCES

1-1-2/5.11.5 of the *Rules for Building and Classing Floating Production Installations*

Subsection 1/4 of the *Requirements for Life Extension of Floating Production Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – **✕** A1, Floating Production, Storage and Offloading System (Ship-Type) (CI) Brazil Santos Basin, **LE(15), 2018**, **✕** AMS...

Offshore Services

NOTATION

Ⓜ

Ⓟ

DESCRIPTION

Ⓜ – This symbol signifies that the anchor, chains or wire rope, which have been specified by the Owner for position mooring, have been tested in accordance with the specifications of the Owner and in the presence of a Surveyor. It is applicable to ship type displacement hull designed for offshore operation as well as to multiple hull design. The symbol Ⓜ is placed after the classification notation **⊠ A1**.

Ⓟ – This symbol signifies that the anchor, chains or wire rope satisfy the ABS *Rules for Building and Classing Mobile Offshore Units* for position mooring, as outlined in Appendix 3-4-A1. It is applicable to ship type displacement hull designed for offshore operation as well as to multiple hull design. The symbol Ⓟ is placed after the classification notation **⊠ A1**. Ⓟ is required for accommodation units, accommodation barges, and pipe-laying or subsea service OSVs with large accommodations with the anchoring arrangement as the sole means of position keeping (i.e., DP system is not installed or does not have the required redundancy).

REFERENCES

1B-2-2/11 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

3-4-1/5 and 3-4-1/7 of the *Rules for Building and Classing Mobile Offshore Units*

2/3.5 of the *Requirements for Position Mooring Systems*

5-3-6/19.5 of the *Rules for Building and Classing Steel Barges*

REMARKS

Position mooring is intended for maintaining position during the operation of the unit.

In general, these notations are optional. However, certain Barges require Ⓟ. Refer to the vessel specific Rules.

Example – **⊠ A1**, Column Stabilized Drilling Unit, Ⓜ...

⊠ A1, Column Stabilized Drilling Unit, Ⓟ...

⊠ A1, Accommodation Barge, Ⓟ...

Offshore Services

NOTATION

(M-PL)

(P-PL)

TAM-PL

TAM-PL (Manual)

DESCRIPTION

(M-PL) – This symbol indicates that the mooring equipment, chain or wire rope (carried onboard the unit) which has been specified by the Owner for position (pre-laid) mooring have been tested in accordance with the specifications of the Owner and in the presence of a Surveyor. The symbol **(M-PL)** is placed after the classification notation **⊠ A1**.

(P-PL) – This symbol indicates that the mooring equipment and components carried onboard a unit and designed for the pre-laid position mooring system has the positioning mooring capability of the unit, when hooked up with pre-laid mooring components, under owner specified environmental conditions and meets the requirements specified in the *Requirements for Position Mooring Systems*. The symbol **(P-PL)** is placed after the classification notation **⊠ A1**.

TAM-PL – This symbol is Indicates a pre-laid system fitted with a TA system with automatic position control. The system is capable maintaining the position and heading of the unit under specified maximum environmental conditions and meet the requirements of requirements of the *Requirements for Position Mooring Systems*. The symbol **TAM-PL** is placed after the classification notation **⊠ A1**.

TAM-PL (Manual) – This symbol indicates a pre-laid system fitted with a TA system that is manually operated by a TA operator. The system is capable maintaining the position and heading of the unit under specified maximum environmental conditions and meets the requirements of the *Requirements for Position Mooring Systems*. The symbol **TAM-PL (Manual)** is placed after the classification notation **⊠ A1**.

REFERENCES

2/3.5 and Section 5 of the *Requirements for Position Mooring Systems*

REMARKS

These notations are optional.

Example – **⊠ A1, (M-PL)**, Column Stabilized Drilling Unit...

⊠ A1, (P-PL), Column Stabilized Drilling Unit...

⊠ A1, TAM-PL, Column Stabilized Drilling Unit...

⊠ A1, TAM-PL (Manual), Column Stabilized Drilling Unit...

Offshore Services

NOTATION

MARGINAL FIELD (*site*)

DESCRIPTION

This notation is assigned to an existing vessel converted to a FPSO, FPS or FSO and intended to be used at marginal field and the unit will be drydocking every 5 years. The **RFL** notation may be omitted. A notation **MARGINAL FIELD** (*site*) will be added after **CI** to indicate the intended use for 5 years for the site.

REFERENCES

1-1-2/5.11.3 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (**CI**)
MARGINAL FIELD (Brazil Santos Basin), ✘ AMS...

Offshore Services

NOTATION

(N)

DESCRIPTION

This notation is assigned to a mobile offshore unit, operating on the Norwegian Continental Shelf (NCS), that has been designed, constructed, installed and surveyed in compliance with the ABS *Guide for Mobile Offshore Units Operating on Norwegian Continental Shelf, N-Notation*.

REFERENCES

1-1/3.1 of the *Guide for Mobile Offshore Units Operating on Norwegian Continental Shelf, N-Notation*

REMARKS

This notation is optional.

Example – ✕ A1, Column-Stabilized Drilling Unit (N)...

Offshore Services

NOTATION

OCC

DESCRIPTION

Offshore Charging Connection (**OCC**) – This notation is assigned to single point moorings fitted with charging stations which are found to comply with the requirements in Part 4, Chapter 5 and Part 5, Chapter 3 of the *ABS Rules for Building and Classing Single Point Moorings*.

REFERENCES

1-1-2/6 of the *Rules for Building and Classing Single Point Moorings*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, Single Point Mooring (**OCC**), FLM(20), 2040...

Offshore Services

NOTATION

OHCM

DESCRIPTION

Offshore Hull Construction Monitoring (OHCM) – This notation is assigned to mobile offshore units and floating installations that have been found in compliance with 7-1-2/4 of the *Rules for Building and Classing Mobile Offshore Units*, Appendix 3-3-A1 of the *ABS Rules for Building and Classing Floating Production Installations*, Chapter 3, Appendix 6 of the *ABS Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*, or Appendix 5 of the *ABS Guide for Building and Classing Drillships*.

REFERENCES

7-1-2/4 of the *Rules for Building and Classing Mobile Offshore Units*

1-1-2/5.15 of the *Rules for Building and Classing Floating Production Installations*

2-1/3.13 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

1/1.1.1(c) of the *Guide for Building and Classing Drillships*

REMARKS

This notation is mandatory.

Example – ✘ A1, Column-Stabilized Drilling Unit, (E), ✘ AMS, ✘ ACCU, **OHCM**...

✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ✘ AMS, **OHCM** ...

✘ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, S(100) Gulf of Mexico, (E), ✘ AMS, ✘ ACCU, **OHCM**...

✘ A1, Drillship, ✘ AMS, **OHCM**...

Offshore Services

NOTATION

RBI(Hull)

RBI(Mooring)

RBI(Riser)

RBI(Topsides Facility)

DESCRIPTION

RBI(Hull) – This notation is assigned to an offshore floating installation with a **Risk-Based Inspection** program for its hull structure approved in accordance with applicable parts of Section 2, Section 3 and Section 5 of the *Guide for Risk-Based Inspection for Floating Offshore Installations*.

RBI(Mooring) – This notation is assigned to an offshore floating installation with a **Risk-Based Inspection** program for its mooring system approved in accordance with applicable parts of Section 2, Section 3 and Section 5 of the *Guide for Risk-Based Inspection for Floating Offshore Installations*.

RBI(Riser) – This notation is assigned to an offshore floating installation with a **Risk-Based Inspection** program for its production riser system approved in accordance with applicable parts of Section 2, Section 3 and Section 5 of the *Guide for Risk-Based Inspection for Floating Offshore Installations*.

RBI(Topsides Facility) – This notation is assigned to an offshore floating installation with a **Risk-Based Inspection** program for its topside static mechanical systems approved in accordance with Section 2, Section 4 and Section 5 of the *Guide for Risk-Based Inspection for Floating Offshore Installations*.

Offshore floating installations with an RBI program for a set of systems from above will be assigned a combination of appropriate notations. For example, **RBI(Hull, Mooring)** may be assigned if hull structure and mooring system both follow an RBI program.

REFERENCES

Subsection 1/7 of the *Guide for Risk-Based Inspection for Floating Offshore Installations*

REMARKS

These notations are optional.

- Example –
- ✘ A1, Floating Production, Storage and Offloading System (TLP) (S) Brazil Santos Basin, (M), **RBI(Hull)**...
 - ✘ A1, Floating Production, Storage and Offloading System (TLP) (S) Brazil Santos Basin, (M), **RBI(Mooring)**...
 - ✘ A1, Floating Production, Storage and Offloading System (TLP) (S) Brazil Santos Basin, (M), **RBI(Riser)**...
 - ✘ A1, Floating Production, Storage and Offloading System (TLP) (S) Brazil Santos Basin, (M), **RBI(Topsides Facility)**...
 - ✘ A1, Floating Production, Storage and Offloading System (TLP) (S) Brazil Santos Basin, (M), **RBI(Hull, Mooring, Topsides Facility)**...

Offshore Services

NOTATION

RCM (AMS)

RCM (CRC)

RCM (DPS)

DESCRIPTION

RCM (AMS) – This notation is assigned to an approved **Reliability-Centered Maintenance Program** for propulsion system, including as applicable: prime mover(s), reduction gears, shafting, propeller or other thrusting device, all auxiliary systems providing, cooling, control, electrical power, exhaust, fuel, lubrication and equipment related to the steering or other directional control system on a self-propelled offshore unit assigned with **AMS** notation, in accordance with Appendix 7-2-A4 of the *ABS Rules for Building and Classing Mobile Offshore Units*.

RCM (CRC) – This notation is assigned to an approved **Reliability-Centered Maintenance Program** for offshore units where deck cranes are classed with **CRC** notation, in accordance with Appendix 7-2-A4 of the *ABS Rules for Building and Classing Mobile Offshore Units*.

RCM (DPS) – This notation is assigned to an approved **Reliability-Centered Maintenance Program** for the dynamic positioning system, including as applicable: prime mover(s), reduction gears, shafting, thrusters, all auxiliary systems providing, cooling, control, electrical power, exhaust, fuel, lubrication and equipment related to the dynamic positioning system on a dynamically positioned unit assigned with **DPS-1**, **DPS-2** or **DPS-3** notations, in accordance with Appendix 7-2-A4 of the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

7-2-A4/3 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

These notations are optional.

Example – ⚡ A1, Column Stabilized Drilling Unit, Ⓟ, ⚡ AMS, **RCM (AMS)**, **RCM (CRC)**, **RCM (DPS)**...

Offshore Services

NOTATION

Restricted Service

Restricted Service – Afloat Condition

Restricted Service – Elevated Condition

DESCRIPTION

These notations are assigned to offshore units which are not designed to meet the full criteria for unrestricted service.

For each mode of operation, the limiting environmental conditions specified by the Owner and used in the design of the unit will not require the notation **Restricted Service**, provided that the criteria for unrestricted service are met. The Owner is responsible to operate the unit within the limiting environmental conditions specified in the Operating Manual.

The notation **Restricted Service** will not be applied to site-specific offshore units or installations (e.g., FPSO, FSO, FPS, TLP, Spar, offshore installation) when the notation includes the geographical description of the site of installation. The name of the field, identification of the block or the geographical coordinates may be acceptable means to identify the site in the class notation.

REFERENCES

1B-2-2/7 of the *Rules for Conditions of Classification – Offshore Units and Structures (Part 1B)*

1-1-2/5 of the *Guide for Building and Classing Liftboats*

2/1.1 of the *Guide for Building and Classing Drillships*

REMARKS

Assignment of these notations requires Class Committee approval unless they are being downgraded from unrestricted service.

These notations are mandatory for offshore units which are not designed to meet the full criteria for unrestricted service.

Example – ☒ A1, Column-Stabilized Drilling Unit, **Restricted Service – Afloat Condition...**

☒ A1, Liftboat, ☒ AMS, **Restricted Service – Elevated Condition ...**

☒ A1, Self-Elevating Unit, **Restricted Service – Elevated Condition...**

☒ A1, Drillship, ☒ AMS, **Restricted Service...**

Offshore Services

NOTATION

RFL(number of years), Year

DESCRIPTION

Remaining Fatigue Life (RFL) – This notation is assigned to an existing vessel that is converted to an FPSO, FPS, FSO, or FLGT in the process referred to as an FPI vessel conversion, and the FPSO, FPS or FSO is classed under the provisions of Section 5A-2-1 of the *ABS Rules for Building and Classing Floating Production Installations*, the expected minimum remaining fatigue life of the structure is to be assessed according to Section 5A-2-3 and documented by recording its value in the *Record*. The **RFL** notation will be followed by the value of the expected minimum remaining fatigue life in years, the year of maturation of fatigue life and the specific site of installation. For example, **RFL(15), 2018** indicates that the expected minimum remaining fatigue life of the structure is 15 years, which will be reached in the year 2018.

This notation is assigned to an existing Self-Elevating Unit (SEU) converted to operate as an offshore installation complying with the *ABS Rules for Building and Classing Offshore Installations* and the *ABS Guide for the Fatigue Assessment of Offshore Structures*, based on the service history provided by the Owner or Operator

The **RFL(number of years), Year** notation as applied to a Self-Elevating Unit (SEU) converted to operate as an offshore installation or an FPI vessel conversion is mandatory.

REFERENCES

1-1-2/5.11.3 of the *Rules for Building and Classing Floating Production Installations*

1-1-2/7.3 of the *Rules for Building and Classing Offshore Installations*

2-1/3.9.3 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

Assignment of this notation requires Class Committee approval.

These notations are mandatory for existing vessels converted to floating offshore installations.

Example – ✕ A1, Floating Production, Storage and Offloading System (Ship-Type) (CI) Brazil Santos Basin, **RFL(15), 2018**, ✕ AMS...

✕ A1, Offshore Installation (Self-Installing Unit), **RFL(10), 2030**...

Offshore Services

NOTATION

RFLM(number of years), Year

DESCRIPTION

Remaining Fatigue Life Mooring (RFLM) – This notation is assigned to an existing vessel that is converted to an FPSO, FPS, FSO, or FLGT in the process referred to as an FPI vessel conversion, and the FPSO, FPS, FSO, or FLGT is classed under the provisions of Section 5A-2-1 of the *ABS Rules for Building and Classing Floating Production Installations* or a single point mooring, where different design fatigue life values are specified for structural elements (hull and hull interface structures) and the position mooring system within the installation and where an existing mooring system is to be reused. This notation refers to the remaining fatigue life of the existing position mooring system.

Year refers to the remaining fatigue life of the existing position mooring system.

The existing mooring systems covered by the notation **RFLM** are limited to all off-the-vessel mooring components, anchor foundation systems, and submerged buoy structure for disconnectable mooring systems. If any of those components has a fatigue life greater than the mooring system indicated in the notation **RFLM**, this may be noted in the *Record*. On-the-vessel mooring components and equipment are to have a design fatigue life equal or greater than the structural elements. If the on-the-vessel components fatigue life exceeds the structural elements, this may also be noted in the *Record*.

REFERENCES

1-1-2/5.11.3 of the *Rules for Building and Classing Floating Production Installations*

1-1-2/1.1 of the *Rules for Building and Classing Single Point Moorings*

2-1/3.9.3 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

Assignment of this notation requires Class Committee approval.

This notation is optional.

Example – ✕ A1, Floating Production, Storage and Offloading System (Ship-Type) (CI) Brazil Santos Basin, **RFL(15), 2018, RFLM(10), 2013**, ✕ AMS...

✕ A1, Single Point Mooring, **RFLM(10), 2013**...

Offshore Services

NOTATION

(S) *site*

DESCRIPTION

This notation is assigned to new-build ship-type installations where transit condition and site-specific environmental data have been used per the *ABS Rules for Building and Classing Floating Production Installations* in lieu of North Atlantic data, for example, **(S) Brazil Santos Basin**.

REFERENCES

1-1-2/5.9.1 of the *Rules for Building and Classing Floating Production Installations*

REMARKS

This notation is mandatory for ship type floating production installations.

Example – ⌘ A1, Floating Production, Storage and Offloading System (Ship-Type) **(S) Brazil Santos Basin**, ⌘ AMS...

Offshore Services

NOTATION

(S) *site*

DESCRIPTION

This notation is assigned to an offshore installation or a Floating Offshore Wind Turbine designed and built to the requirements for pre-service conditions and strength criteria for in-service site-specific conditions in accordance with the *Rules for Building and Classing Offshore Installations*, the *Guide for Building and Classing Floating Offshore Wind Turbines*, or the *Guide for Building and Classing Bottom-Founded Offshore Wind Turbines* and maintained in accordance with the applicable ABS requirements.

The site-specific environmental data and electric network condition data (as applicable) for in-service conditions will be indicated by the **(S)** qualifier following the basic notation. The **(S)** qualifier followed by the definition of the site is mandatory to be assigned and published in the *ABS Record*.

REFERENCES

1-1-2/7.1 of the *Rules for Building and Classing Offshore Installations*

1-1/7.3 of the *Guide for Building and Classing Floating Offshore Wind Turbines*

1-1/5.3 of the *Guide for Building and Classing Bottom-Founded Offshore Wind Turbines*

REMARKS

This notation is mandatory.

Example – ☒ A1, Offshore Installation, **(S) Gulf of Mexico...**

☒ A1, Offshore Wind Turbine (Floating), **(S) Gulf of Maine...**

☒ A1, Offshore Wind Turbine (Bottom-Founded), **(S) Gulf of Maine...**

Offshore Services

NOTATION

(S years) site

DESCRIPTION

This notation is assigned to floating terminals designed and built to the special modified requirements for on-site operation, thus **F(LNG) PLSO (S100) Gulf of Mexico**, where “100” signifies that the terminal is reviewed for 100 years design return period.

REFERENCES

2-1/3.5 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

This notation is mandatory where the terminal has been designed to the modified requirements for on-site operation.

Example – ❌ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, **(S100) Gulf of Mexico**,
❌ AMS...

Offshore Services

NOTATION

SFA(number of years), Year

DESCRIPTION

Spectral Fatigue Analysis (**SFA**) – This notation is assigned to vessels where Spectral Fatigue Analysis is performed in accordance with criteria established in Part 5A, Chapter 1 of the *ABS Rules for Building and Classing Floating and Production Installations* and the *ABS Guide for the Fatigue Assessment of Offshore Structures*.

The (**number of years**) refers to the design fatigue life equal to 20 years or more (in 5-year increments), as specified by the applicant. The **Year** is the year of maturation of fatigue. For example, **SFA (30), 2041** if the design fatigue life specified is 30 years, and the vessel is built in 2011.

REFERENCES

1-1-2/5.12.1 of the *Rules for Building and Classing Floating and Production Installations*

2-1/3.11 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

1/1.1.1(a)i of the *Guide for Building and Classing Drillships*

REMARKS

This notation is optional.

Example – ✘ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ✘ AMS, **SFA(30), 2041**...

✘ A1, Offshore Liquefied Gas Terminal, F(LNG) PLSO, (S100) Gulf of Mexico,
✘ AMS, **SFA(30), 2041**...

✘ A1, Drillship, ✘ AMS, **SFA(30), 2041**...

Offshore Services

NOTATION

SFA(R number of years), Year

DESCRIPTION

Spectral Fatigue Analysis (**SFA(R number of years), Year**) – This notation is assigned to existing vessels converted to an FPSO, FPS or FSO where Spectral Fatigue Analysis is applied to assess the expected minimum remaining fatigue life of the structure

The **SFA** notation will be followed by the value of the expected minimum remaining fatigue life in years preceded by the letter **R**, and the year of maturation of fatigue life in the defined site location.

REFERENCES

1-1-2/5.12.2 of the *Rules for Building and Classing Floating and Production Installations*

REMARKS

This notation is optional.

Example – ✕ A1, Floating Production, Storage and Offloading System (Ship-Type) (S) Brazil Santos Basin, ✕ AMS, **SFA (R15), 2018...**

Offshore Services

NOTATION

☒ SM1

☒ SM2

DESCRIPTION

SM1 – This notation is assigned to offshore mobile mining units whose subsea mining systems and equipment comply with the requirements found in Sections 5 and 7 of the *ABS Requirements for Subsea Mining*, manufactured and installed under ABS survey and found satisfactory after testing.

SM2 – This notation is assigned to offshore mobile mining units whose subsea mining systems and equipment comply with the requirements of the ☒ **SM1** notation and the requirements found in Sections 6 and 7 of the *ABS Requirements for Subsea Mining* for the additional subsea mining systems and equipment, manufactured and installed under ABS survey and found satisfactory after tests.

REFERENCES

1/2.3 of the *Requirements for Subsea Mining*

REMARKS

Assignment of these notations requires Class Committee approval.

These notations are optional.

Example – ☒ A1, Subsea Mining (Ship-Type), ☒ AMS, ☒ **SM1**...

☒ A1, Subsea Mining (Ship-Type), ☒ AMS, ☒ **SM2**...

Offshore Services

NOTATION

TAM

TAM-R

TAM (Manual)

DESCRIPTION

TAM – This notation indicates that the combined mooring and thruster systems is capable of automatically maintaining the position and heading of the unit under owner specified maximum environmental conditions and meets the requirements specified in the *Requirements for Position Mooring Systems*.

TAM-R – This notation indicates that the combined mooring and thruster systems is capable of automatically maintaining the position and heading of the unit under owner specified maximum environmental conditions, thruster system meets the requirements specified in the *Requirements for Position Mooring Systems*, including redundancy.

TAM (Manual) – This notation indicates the combined mooring and thruster system is capable of maintaining the position and heading of the unit under owner specified maximum environmental conditions, thruster system is manually controlled and meets the requirements specified in the *Requirements for Position Mooring Systems*.

REFERENCES

2/3.5 and Section 4 of the *Requirements for Position Mooring Systems*

REMARKS

These notations are optional.

Example – ✘ A1, Column Stabilized Drilling Unit, (M), ✘ AMS, **TAM**...
✘ A1, Column Stabilized Drilling Unit, (M), ✘ AMS, **TAM-R**...
✘ A1, Column Stabilized Drilling Unit, (M), ✘ AMS, **TAM (Manual)**...

Offshore Services

NOTATION

Topside Modules

DESCRIPTION

This optional notation is assigned at the request of the Owner when the topside modules of a Ship-Type Installation or ship-type floating offshore liquefied gas terminal comply with Section 5A-1-5 of the ABS *Rules for Building and Classing Floating Production Installations*, or 3-7-/11 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals* as appropriate.

REFERENCES

1-1-2/3.5 of the *Rules for Building and Classing Floating Production Installations*

2-1/1.1 of the *Guide for Building and Classing Floating Offshore Liquefied Gas Terminals*

REMARKS

This notation is optional.

Example – ✘ A1, Floating Offshore Installation (Ship-Type) (**Topside Modules**)...
✘ A1, Offshore Liquefied Gas Terminal F(LNG) T (**Topside Modules**)...

Offshore Services

NOTATION

WI

WI-READY

WIR

WIR-READY

DESCRIPTION

WI – This notation will be assigned to mobile offshore units fitted with Riserless Well Intervention (RLWI) systems that comply with Section 5D-10-4 of the *ABS Rules for Building and Classing Marine Vessels*.

WI-READY – This notation will be assigned to mobile offshore units designed to be riserless “well intervention ready” that comply with Section 5D-10-2 of the *ABS Rules for Building and Classing Marine Vessels*.

WIR – This notation will be assigned to mobile offshore units fitted with Riser-based Well Intervention (RBWI) systems that comply with Section 5D-10-4 of the *ABS Rules for Building and Classing Marine Vessels*.

WIR-READY – This notation will be assigned to mobile offshore units designed to be riser-based “well intervention ready” that comply with Section 5D-10-2 of the *ABS Rules for Building and Classing Marine Vessels*.

REFERENCES

8-9-1/3 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of the **WI** or **WIR** notation requires Class Committee approval.

These notations are optional. However, the Rules contain mandatory requirements for units that have a well intervention system installed.

- Example –
- ✘ A1, Column-Stabilized Unit, **WI**, (E), ✘ AMS...
 - ✘ A1, Column-Stabilized Unit, **WI-READY**, (E), ✘ AMS...
 - ✘ A1, Column-Stabilized Unit, **WIR**, (E), ✘ AMS...
 - ✘ A1, Column-Stabilized Unit, **WIR-READY**, (E), ✘ AMS...

Offshore Services

NOTATION

WS

WS-READY

DESCRIPTION

WS – This notation may be assigned to mobile offshore units fitted with well stimulation systems that comply with the 8-10-1/5.5 and other relevant requirements of the *ABS Rules for Building and Classing Mobile Offshore Units*.

WS-READY – This notation may be assigned to mobile offshore units designed to be “well stimulation ready” that comply with the 8-10-1/5.1 and other relevant requirements of the *ABS Rules for Building and Classing Mobile Offshore Units*.

REFERENCES

8-10-1/3 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of the **WS** notation requires Class Committee approval.

These notations are optional. However, the Rules contain mandatory requirements for units that have a well stimulation system installed.

Example – ☒ A1, Column-Stabilized Unit, **WS**, Ⓢ, ☒ AMS...

☒ A1, Column-Stabilized Unit, **WS-READY**, Ⓢ, ☒ AMS...

Offshore Services

NOTATION

Well Test

WT-READY

DESCRIPTION

Well Test – This notation may be assigned to mobile offshore units fitted with well test systems that comply with the requirements of Section 5D-12-4 of the *ABS Rules for Building and Classing Marine Vessels*.

WT-READY – This notation may be assigned to mobile offshore units designed to be “well test ready” that comply with the requirements of Section 5D-12-2 of the *ABS Rules for Building and Classing Marine Vessels*.

For vessels assigned with **Well Test** notations, **WT-READY** notation may be assigned based on Owner's request when the Well Test systems are removed and when the requirements in Section 5D-12-2 of the *ABS Rules for Building and Classing Marine Vessels* are complied with.

REFERENCES

8-11-1/3 of the *Rules for Building and Classing Mobile Offshore Units*

REMARKS

Assignment of the **Well Test** notation requires Class Committee approval.

These notations are optional. However, the Rules contain mandatory requirements for units that have a well test system installed.

Example – ☒ A1, Column-Stabilized Unit, **Well Test**, (E), ☒ AMS...

☒ A1, Column-Stabilized Unit, **WT-READY**, (E), ☒ AMS...