GUIDE FOR

PERFORMANCE STANDARDS FOR CORROSION PROTECTION

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American Bureau of Shipping
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Foreword

SOLAS Chapter II-1/3-2 and SOLAS Chapter II-1/3-11 specify corrosion protection requirements for ballast tanks and cargo oil tanks, respectively.

The original and revised ABS Guide for the Class Notation Coating Performance Standard (CPS) was developed to comply with IMO Resolution MSC.215(82), required by SOLAS Chapter II-1/3-2, amended by IMO Resolution MSC.216(82). The CPS notation was required by ABS to be assigned at new construction for vessels with contract signing from 8 December 2006 in accordance with the IACS Common Structural Rules and IACS PR 34 until the IMO regulation for all ships entered into force on 1 July 2008.

SOLAS Chapter II-1/3-11 specifies additional corrosion protection requirements for the cargo oil tanks of crude oil tankers contracted on or after 1 January 2013.

This Guide supersedes the ABS Guide for the Class Notation Coating Performance Standard (CPS) and specifies the additional ABS CPS-COT and CorrResistant notations for compliance with the SOLAS Chapter II-1/3-11 requirements for cargo oil tanks.

To assist the marine and offshore industries, ABS offers the CPS, CPS-COT and CorrResistant notations on corrosion protection of Seawater Ballast Tanks and Cargo Oil Tanks for compliance with the IMO regulations. This Guide is provided to identify compliance with the IMO regulations on corrosion protection for the builders, owners, and operators of vessels classed with ABS. The notations can help to promote the effective application of the IMO Performance Standards on ABS-classed vessels.

This Guide becomes effective on the first day of the month of publication.

Users are advised to check periodically on the ABS website www.eagle.org to verify that this version of this Guide is the most current.

We welcome your feedback. Comments or suggestions can be sent electronically by email to rsd@eagle.org.
# GUIDE FOR PERFORMANCE STANDARDS FOR CORROSION PROTECTION

## CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>General</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scope</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Abbreviations</td>
<td>1</td>
</tr>
</tbody>
</table>

## SECTION 2 CPS Notation

| 1 | Scope | 3 |
| 2 | Basis of Notation | 3 |
| 3 | Process | 3 |
| 3.1 | Process Flow | 3 |
| 3.2 | Detailed Instructions | 5 |
| 4 | Documentation | 7 |
| 4.1 | Required Specific Certification and Documentation | 7 |
| 4.2 | Assembly of Information and Retention | 8 |
| 5 | Certification of the Coating Systems | 8 |
| 5.1 | General | 8 |
| 5.2 | Existing Epoxy Coating Systems | 8 |
| 5.3 | New Epoxy Coating Systems | 8 |
| 5.4 | Alternative Systems | 8 |
| 5.5 | Certification | 9 |
| 6 | Survey After Construction | 9 |

**FIGURE 1** Coating Process Flow | 4

**FIGURE 2** Coating Pre-qualification Testing Flow (Referred to in Figure 1) | 5

## SECTION 3 CPS-COT Notation

| 1 | Scope | 10 |
| 2 | Basis of Notation | 10 |
| 3 | Process | 10 |
| 4 | Documentation | 10 |
| 5 | Certification of the Coating Systems | 10 |
| 6 | Survey After Construction | 10 |
SECTION 4 CorrResistant Notation

1 Scope
2 Basis of Notation
3 Process
4 Documentation
5 Certification of the Corrosion Resistant Steel
6 Survey After Construction
1 Scope

The Guide specifies the requirements for the following optional ABS notations:

- The **CPS** notation indicates compliance with IMO Resolution MSC.215(82) Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-Side Skin Spaces of Bulk Carriers (IMO PSPC-SWBT), required by SOLAS Chapter II-1/3-2, amended by IMO Resolution MSC.216(82).

- The **CPS-COT** notation indicates compliance 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).

- The **CorrResistant** notation indicates compliance 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).

For issuance of the ABS notations, ABS Type Approval(s) of the coating system(s) and/or corrosion resistant steel(s) is required.

The following is the applicability of the ABS notations:

i) The ABS **CPS** notation is mandatory at new construction for ABS-classed Common Structural Rules (CSR) vessels contracted for construction between the builder and the owner on or after 8 December 2006 and before 1 July 2008. The ABS **CPS** notation is optional for all other ABS-classed vessels.

ii) The ABS **CPS-COT** and **CorrResistant** notations are optional notations that indicate compliance with the SOLAS regulations and subject to owner’s request.

2 Abbreviations

The following abbreviations are used through this Guide:

- **CPS**: Coating Performance Standard
- **CSR**: Common Structural Rules, see ABS *Rules for Building and Classing Steel Vessels*, Part 5A (Double Hull Oil Tankers) and Part 5B (Bulk Carriers) (2006-2008)
- **CTF**: Coating Technical File
- **TF**: Technical File
- **IACS**: International Association of Classification Societies
- **IMO PSPC-SWBT**: IMO Resolution MSC.215(82) – Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in All Types of Ships and Double Side Spaces of Bulk Carriers, required by SOLAS Chapter II-1/3-2, amended by IMO Resolution MSC.216(82)
IMO PSPC-COT  IMO Resolution MSC.288(87) – Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers, required by SOLAS Chapter II-1/3-11, amended by IMO Resolution MSC.291(87)

IMO PSCRS-COT  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, required by SOLAS Chapter II-1/3-11, amended by IMO Resolution MSC.291(87)
SECTION 2  CPS Notation

1 Scope

The CPS notation is applicable to protective coatings of dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers.

The CPS notation indicates compliance with IMO Resolution MSC.215(82), Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in all Types of Ships and Double-Side Skin Spaces of Bulk Carriers (IMO PSPC-SWBT), required by SOLAS Chapter II-1/3-2, amended by IMO Resolution MSC.216(82). Compliance with IACS UIs SC223, SC227 and SC226.2 is also required for the CPS notation. In applying IACS UI SC223 for ABS-classed vessels, “Administration” is to be read as “ABS”.

The CPS notation applies to:

- All dedicated seawater ballast tanks arranged in Oil Tankers of 150 meters (492 feet) in length or greater;
- All dedicated seawater ballast tanks arranged in Bulk Carriers of 90 meters (295 feet) in length or greater;
- Double-side skin void spaces arranged in Bulk Carriers of 150 meters (492 feet) in length and upwards.

Compliance with the CPS notation is mandatory for ABS-classed CSR vessels contracted for construction between the builder and the owner on or after 8 December 2006 and before 1 July 2008. For all other ABS-classed vessels, the CPS notation is optional and subject to owner’s request.

2 Basis of Notation

Complying with the following is a prerequisite for receiving the ABS CPS notation:

i) IMO Resolution MSC.215(82), Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-Side Skin Spaces of Bulk Carriers (IMO PSPC-SWBT)

ii) IACS UIs SC223, SC227 and SC226.2: IACS Unified Interpretations for Application of SOLAS Regulation II-1/3-2 Performance Standard for Protective Coatings (PSPC-SWBT) for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-side Skin Spaces of Bulk Carriers, adopted by IMO Resolution MSC.215(82)

iii) IACS UR Z17, IACS Procedural Requirements for Service Suppliers

3 Process

3.1 Process Flow

The general coating process typically follows a process flow as shown in Section 2, Figure 1 for IMO PSPC-SWBT. Each of the major coating steps is indicated, together with a cross reference to the applicable section within the IMO PSPC-SWBT. The various documentation and review steps are necessary to demonstrate compliance with the IMO PSPC-SWBT and IACS UIs SC223 and SC227.

The IMO PSPC-SWBT also includes requirements for pre-qualifying IMO PSPC coating systems. The general process flow for pre-qualifying coatings is shown in Section 2, Figure 2.
FIGURE 1
Coating Process Flow

Before IMO PSPC-SWBT Project Starts
- Coating specification agreed upon between the coating producer, the shipyard, and the ship owner (Table 1), (3.2)
- Areas of coating application (list of tanks and spaces) (1, 4.2 - 4.4)
- Type Approval (Figure 2) and selection of coating system (Table 1/1, 4.4.2, 4.4.3, 5) (A1 & A2)
- Coating Inspectors and Inspection (6.1)
- Coating processes and procedures at all construction stages (3.4.1, Annex 2 & 3)
- Procedures for in-service maintenance and repair of coating systems (3.4.3)

Inspection During IMO PSPC-SWBT Project
- Primary surface preparation & shop priming (Table 1/2)
- Secondary surface preparation – welds, edges, and damaged shop primer (Table 1/3)
- Coating application of blocks (Table 1/1 & 4)
- Secondary surface preparation - erection joint areas and coating damages (Table 1/3.3)
- Erection joint coating application and coating damage repair (Table 1/1 and 4.4)

CTF documentation assembly & submission by the shipyard for ABS review (3.2, 3.4, 7)

End of IMO PSPC-SWBT Project

CTF: kept on board and maintained throughout the ship life (3.4.3, 3.4.4)

Note: Parentheses are references to IMO PSPC-SWBT and related IACS UIs
Section 2 CPS Notation

FIGURE 2
Coating Pre-qualification Testing Flow (Referred to in Figure 1)

Coating System Pre-qualification

Epoxy-based System

- 5 years of field exposure w/ “GOOD” rating of coating condition (Table 1/1.3)
- Tested prior to 1 July 2008 (Table 1/1.3) (A1/3.2) (A2/3.2)
- Tested on/after 1 July 2008 (Table 1/1.3) (A1 & A2)

Alternative coating systems tested to the test procedures in Annex 1 or equivalent (8) (Annex 1)

Coating system Type Approval

Note: Parentheses are references to IMO PSPC-SWBT and related IACS Uls

3.2 Detailed Instructions

Detailed instructions for each of the major steps shown in Section 2, Figures 1 and 2 are provided in the following Subparagraphs.

3.2.1 Coating Inspection Agreement

The inspection procedure of surface preparation and coating processes is to be agreed by the ship owner, the shipyard, and the coating manufacturer. The resulting Tripartite Agreement is to be submitted to ABS for the PSPC-SWBT compliance review prior to commencement of any coating work at any stage of a new building. ABS may, if it so determines, participate in the agreement process. The Tripartite Agreement is to be included in The Coating Technical File (CTF). See IMO PSPC-SWBT 3.2.

The specification is, as a minimum, to be in accordance with all the requirements of IMO PSPC-SWBT Table 1. The specification, as defined in IMO PSPC-SWBT paragraph 2 of Annex 1, is to contain the type of coating system, steel preparation, surface preparation, surface cleanliness, environmental conditions, application procedure, acceptance criteria and inspection criteria.

3.2.1(a) Selection of Areas to be Coated. IMO PSPC-SWBT is applicable for protective coatings in dedicated seawater ballast tanks of all types of ships of not less than 500 gross tonnage and double-side skin spaces arranged in bulk carriers per Subsection 2/1 above.

Together with the Tripartite Agreement submitted, the shipyard is to prepare and submit a list of all spaces including block identifications to be coated in accordance with the IMO PSPC-SWBT Sections 1, 4.2, and 4.3 to ABS for review. The final list is to be included in the CTF per 2/4.1.1 below.

3.2.1(b) Coating Inspector(s). The qualifications of the coating inspector(s) are to comply with the requirements in IMO PSPC-SWBT 6.1.1. Coating inspector qualification, requirements for assistant inspectors, and equivalent qualification of coating inspectors are clarified in IACS UI SC223.

3.2.1(c) Selection of Coating System. The selection of coatings is to take into account the expected service conditions and intended planned maintenance program that should provide a target useful coating life of 15 years in “GOOD” condition in accordance with IMO PSPC-SWBT section 4.1. The selected coatings are to be listed and cross referenced to the spaces to be coated as per 2/3.2.1(a) above. See IMO PSPC-SWBT Table 1, 1.1.
The selected coating system is to be Type Approved (per 2/3.1.2(d) below) for compliance with IMO PSPC-SWBT 5, by a pre-qualification test as illustrated in Section 2, Figure 2. See IMO PSPC-SWBT Table 1, 1.3.

The “Technical Data Sheet” of each selected coating are also to be documented with the coating’s product identification, verified application procedures, and application requirements. See IMO PSPC-SWBT Sections 3.4.2.2, 4.4.4, and Table 1, 1.1.

The coating manufacturer is to provide copies of the Technical Data Sheets for each coating system to be used to the shipyard for inclusion into the CTF per 2/4.1.1 below.

3.2.1(d) Type Approval Certificate. An “ABS Type Approval Certificate” which signifies that one of the options as illustrated in Section 2, Figure 2 has been satisfied is to be obtained for each coating system selected. See IMO PSPC-SWBT Section 4.4.3 and 5.

The coating manufacturer is to provide copies of the ABS Type Approval Certificate for each coating system to be used in accordance with the IMO PSPC-SWBT to the shipyard for inclusion into the CTF per 2/4.1.1 below.

3.2.1(e) Primary Surface Preparation. The primary surface preparation is to comply with IMO PSPC-SWBT Table 1, 2.1 and 2.2.

The yard is to carry out the primary surface preparation and retain work records or other documentation as confirmation of the preparation treatment. Coating inspector(s) are to carry out inspections and document their confirmation that the primary surface preparation is within the standard. The documents are to be included in the CTF per 2/4.1.1 below.

3.2.1(f) Shop Primer Application. The shop primer is to be applied in compliance with IMO PSPC-SWBT Table 1, 2.3. See IACS UI SC223 for review of Quality Control of Automated Shop Primer plants for common interpretations concerning shop primer.

The yard is to apply the shop primer and retain work records or documentation. Coating inspector(s) are to carry out inspections and document that the shop primer application is within the standard and compatible with the selected coating to be applied. The documents are to be included in the CTF per 2/4.1.1 below.

3.2.1(g) Secondary Surface Preparation. The secondary surface preparation is to comply with IMO PSPC-SWBT Table 1, 3.

The yard is to carry out the secondary surface preparation and retain work records or other documentation as confirmation of the surface preparation. Coating inspector(s) are to carry out inspections and document their confirmation that the secondary surface preparation is within the standard. The documents are to be included in the CTF per 2/4.1.1 below.

3.2.1(h) Protective Coating Application. The protective coating is to be applied in compliance with IMO PSPC-SWBT Table 1, 1.4 and 1.5. The application conditions from IMO PSPC-SWBT Table 1, 4.1 and 4.2 are to be followed. Inspection of the coating is to be performed as per 2/3.2.1(i) below.

The yard is to apply the coatings and retain work records or documentation. Coating inspector(s) are to carry out inspections and document that the coating application is within the standard. The documents are to be included in the CTF per 2/4.1.1 below.

3.2.1(i) Coating Inspection. The coating is to be inspected at various stages of surface preparation and application to verify and document that the surface preparation and the coating application are within the standard as per IMO PSPC-SWBT Section 6.1.2.

The coating inspectors are to document the results from the inspections per IMO PSPC-SWBT Section 6.1.3, Annex 2 and Annex 3. The documents are to be included in the CTF per 2/4.1.1 below.

ABS is to monitor and verify (see 2/3.2) the implementation of the PSPC-SWBT requirements as indicated by IMO PSPC-SWBT Section 7.
Section 2 CPS Notation

3.2.1(j) Coating Repair. Any defective areas of the coatings are to be repaired per IMO PSPC-SWBT Table 1, 4.4. The coating inspectors are to document the results from the inspections of the repaired areas per IMO PSPC-SWBT Section 6.1.3 and Annex 2. The documents are to be included in the CTF per 2/4.1.1 below.

3.2.1(k) CTF Documentation and Review. IMO PSPC-SWBT mandates that each step in the coating process is performed strictly in accordance with the specifications and is properly documented. The Coating Inspection Agreement, called the Tripartite Agreement, is to be documented and reviewed prior to the performance of the actual work. Daily log and non-conformity reports for the inspection items listed in IMO PSPC-SWBT Section 6.2 are required to illustrate the conditions and inspection results of the actual work carried out. The assembly and submission of all documents, called the Coating Technical File (CTF), is the overall responsibility of the shipyard as per IMO PSPC-SWBT Section 3.4 and Subsection 2/4 of this Guide below. The final CTF file is to be submitted to the attending ABS Surveyor for review.

3.2.2 Verification Procedure
The basic verification procedure is included in IMO PSPC-SWBT Section 7. The following information is to be verified by ABS prior to reviewing the CTF in support of the CPS notation.

i) Technical Data Sheet, Type Approval Certificate. Verify the Technical Data Sheet and the ABS Type Approval Certificates for compliance with IMO PSPC-SWBT Section 5.

ii) Coating Identification. The attending ABS Surveyor is to verify on a sampling basis that the coating identification on representative containers is the same coating identified in the Technical Data Sheet and the ABS Type Approval Certificate.

iii) Coating Inspector Qualification. The attending ABS Surveyor is to verify that the coating inspector(s) and assistant inspector(s) are qualified in accordance with the qualification standards in IMO PSPC-SWBT Section 6.1.1 and IACS UI SC223.

iv) Coating Inspector’s Reports. The attending ABS Surveyor is to verify that the coating inspector’s reports of surface preparation and the coatings’ application indicate compliance with the manufacturers’ Technical Data Sheet, the ABS Type Approval Certificate, and coating specification agreed in the Tripartite Agreement.

v) Implementation of Coating Inspection Requirements. The attending ABS Surveyor is to monitor implementation of the coating inspection requirements, see IMO PSPC-SWBT Section 7.5 and IACS UI SC223.

3.2.3 Maintenance, Repair, and Partial Re-coating
The coatings are to be maintained and repaired in accordance with the Guidelines for Maintenance and Repair of Protective Coatings from IMO Circular MSC.1/Circ.1330. See IMO PSPC-SWBT Sections 3.4.3 and 3.4.4.

Records of maintenance, repair, and partial re-coating are to be documented in the CTF, which is to be kept on board and maintained throughout the life of the vessel in accordance with IMO PSPC-SWBT Section 3.4.5.

4 Documentation

4.1 Required Specific Certification and Documentation
The following documentation and certification are required in order to receive and maintain the CPS notation:

4.1.1 Coating Technical File (CTF)
As mentioned above in 2/3.2, the preparation and continuous update of the CTF and the existence of the CTF endorsed by qualified coating inspector(s) on board the vessel are the basis for the CPS notation. The CTF is to include the information listed in IMO PSPC-SWBT Sections 3.4.2, 3.4.3, and 3.4.4. The CTF is to be available for reference by the ABS Surveyor during new construction and during class surveys after construction. See IMO PSPC-SWBT 3.4.5.
4.2 Assembly of Information and Retention

4.2.1 New Construction Phase

The CTF is to be initiated prior to commencement of any coating work and continuously updated by the shipbuilder or their representative qualified coating inspector(s) throughout the construction phase. The CTF is to be endorsed by qualified coating inspector(s) and is to be placed on board the vessel upon delivery of the vessel. See IMO PSPC-SWBT Sections 3.4.2 and 3.4.5.

4.2.2 In-service Phase

The CTF is to be retained on board and continuously updated to reflect any coating work by the shipowner or their representative qualified coating inspector(s) throughout the vessel’s life for the ABS Surveyor’s verification, as necessary, at the class surveys after construction. See IMO PSPC-SWBT Sections 3.4.3, 3.4.4 and 3.4.5 and IMO Circular MSC.1/Circ.1330.

5 Certification of the Coating Systems

5.1 General

There are three different methodologies specified in IACS UI SC223 for the coating manufacturer to apply for approval of its coating system, namely, laboratory testing for new coating systems, five years of field exposure for existing coating systems, or an existing Marintek B1 test reported prior to 8 December 2006. Additionally, the coating manufacturer is to comply with sections of the procedural requirements for service suppliers as per IACS UR Z17 and IACS UI SC223 Method D.

5.2 Existing Epoxy Coating Systems

5.2.1 5 Year Field Test

As indicated in IMO PSPC-SWBT Table 1, 1.3, existing epoxy coating systems may be applied to provide protection against corrosion, provided they have documented field exposure for at least five (5) years with a final coating condition of not less than “GOOD”. ABS is to review the particulars related to an existing epoxy system and, if found satisfactory, may issue a Product Design Assessment (PDA) Certificate indicating adherence to the standard. See IACS UI SC223 “Method B”.

5.2.2 Marintek B1 Approvals

Epoxy coating systems with an existing satisfactory Marintek B1 test reported prior to 8 December 2006 may be applied to provide protection against corrosion. ABS is to review the particulars related to an existing epoxy system and, if found satisfactory, may issue a Product Design Assessment (PDA) Certificate indicating adherence to the standard. See IACS UI SC223 “Method C”.

5.3 New Epoxy Coating Systems

As indicated in IMO PSPC-SWBT Table 1, 1.3 and Table 1, 3.2 (“Crossover Test”), new epoxy coating systems may be applied to provide protection against corrosion, provided that they have been tested and documented in accordance with the procedures detailed in IMO PSPC-SWBT Annex 1.

ABS is to review the particulars related to the testing of the epoxy system and, if found satisfactory, may issue a Product Design Assessment (PDA) Certificate indicating adherence to the standard. It is noted in IMO PSPC-SWBT Annex 1, 3.2 that if the testing is performed prior to the entry into force of the standard, only the criteria for blistering and rust are to be satisfied. After the entry into force, all aspects of the test are to be satisfied. See IACS UI SC223 “Method A”.

5.4 Alternative Systems

Alternative systems may be certified in accordance with IMO PSPC-SWBT Section 8. ABS is to review the particulars related to the testing of the alternative system (IMO PSPC-SWBT Annex 1, Appendix 1 Section 3 and Appendix 2 Section 3) and, if found satisfactory, may issue a Product Design Assessment (PDA) Certificate indicating adherence to the standard.
5.5 Certification

Certification of a coating system may be made by issuance of an ABS Type Approval Certificate.

Upon satisfactory review of the particulars related to the testing of the coating system as indicated in 2/5.2, 2/5.3, or 2/5.4 above and the details of the ABS Type Approval Program specified in 1-1-4/7.7 and Appendix 1-1-A3 of the ABS Rules for Conditions of Classification (Part 1), ABS may issue a Type Approval Certificate to the coating manufacturer.

6 Survey After Construction

At each periodical survey (Annual, Intermediate, and Renewal or Special Periodical Surveys), the attending Surveyor is to verify the following in order to retain the CPS notation:

i) Ballast tank coatings are to be maintained in GOOD condition.

ii) Certification and documentation are on board as required in Subsection 2/4 and Subsection 2/5 above.

iii) Approved operational maintenance and repair procedures as outlined in 2/3.2.3 above are maintained on board.

iii) At the time of the corresponding periodical survey, any maintenance or repair of coating that has been carried out are properly documented, as per 2/6ii).
Section 3: CPS-COT Notation

1 Scope
The optional CPS-COT notation indicates that a crude oil tanker meets IMO Resolution MSC.288(87), Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers (IMO PSPC-COT).

2 Basis of Notation
Complying with the following is a prerequisite for receiving the ABS CPS-COT notation:
   i) IMO Resolution MSC.288(87), Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers (IMO PSPC-COT)
   ii) IACS UI SC259, IACS Unified Interpretations for Application of SOLAS Regulation II-1/3-11 Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers (PSPC-COT), adopted by IMO Resolution MSC.288(87)
   iii) IACS UR Z17, IACS Procedural Requirements for Service Suppliers

3 Process
The general coating process typically follows a similar process flow as shown in Section 2, Figure 1 for IMO PSPC-SWBT.

4 Documentation
The documentation for both new construction and in-service maintenance/repair is required to receive and maintain the CPS-COT notation, similar to the CPS notation in Subsection 2/4.

5 Certification of the Coating Systems
The coating system used for the crude oil tanks shall be type-approved by ABS in order to receive the CPS-COT notation. The coating system type approval methodologies are similar to the ones for the CPS notation (Subsection 2/5) except for Marintek B1 Approvals.

6 Survey After Construction
At each periodical survey (Annual, Intermediate, and Renewal or Special Periodical Surveys), the attending Surveyor is to verify the following in order to retain the CPS-COT notation:
   i) Cargo oil tank coatings are to be maintained in GOOD condition.
   ii) Certification and documentation are on board as required in Subsection 3/4 and Subsection 3/5 above.
   iii) Approved operational maintenance and repair procedures for the crude oil tanks are maintained on board, similar to 2/3.2.3 for the CPS notation.
   iv) At the time of the corresponding periodical survey, any maintenance or repair of coating that has been carried out are properly documented, as per 3/6ii).
SECTION 4 CorrResistant Notation

1 Scope
The optional CorrResistant notation indicates that a crude oil tanker meets IMO Resolution MSC.289(87), Performance Standard for Alternative Means of Corrosion Protection for Cargo Oil Tanks of Crude Oil Tankers – Performance Standard for Corrosion Resistant Steel (IMO PSCRS-COT).

2 Basis of Notation
Complying with the following is a prerequisite for receiving the ABS CorrResistant notation:
i) IMO Resolution MSC.289(87), Performance Standard for Alternative Means of Corrosion Protection for Cargo Oil Tanks of Crude Oil Tankers

ii) IACS UI SC258: IACS Unified Interpretations for Application of Regulation 3-11, Part A-1, Chapter II-1 of the SOLAS Convention (Corrosion Protection of Cargo Oil Tanks of Crude Oil Tankers), adopted by Resolution MSC.289 (87)

3 Process
The process during new construction typically includes the following at least:
i) Areas of application for the corrosion resistant steel(s)

ii) Selection of the corrosion resistant steel(s), welding consumables and their Type Approval certificate

iii) IMO PSPC-COT coating system selection and application areas if coating is used.

iv) Inspection and ABS survey verification

v) Documentation in Technical File (TF)

vi) In-service maintenance and repair procedures, if any

4 Documentation
The documentation in Technical File (TF) for both new construction and in-service maintenance/repair is required to receive and maintain the CorrResistant notation. The TF is to be kept on board and maintained throughout the entire life of the ship.

5 Certification of the Corrosion Resistant Steel
When corrosion resistant steel is considered as an “alternative means” to protective coatings for crude oil tanks, the watertight and structural integrity in cargo oil tanks is to be maintained for at least 25 years in service. In order to receive the CorrResistant notation, the corrosion resistant steel(s) and welding consumables are to be type-approved by ABS in accordance with the test procedures given in the Annex to IMO PSCRS-COT, in addition to other relevant strength requirements from Section 2-1-7 of the ABS Rules for Materials and Welding (Part 2).
6 Survey After Construction

At each periodical survey (Annual, Intermediate, and Renewal or Special Periodical Surveys), the attending Surveyor is to verify the following in order to retain the CorrResistant notation:

i) Certification and documentation are on board as required in Subsection 4/4 and Subsection 4/5 above.

ii) Approved operational maintenance and repair procedures, if any, for the corrosion resistant steel(s) are maintained on board.

iii) At the time of the corresponding periodical survey, any maintenance or repair data of the corrosion resistant steel(s) that has been carried out are properly documented, as per 4/6ii).