

GUIDE FOR CLASSIFICATION AND CERTIFICATION OF

MANAGED PRESSURE DRILLING SYSTEMS

SEPTEMBER 2017

NOTICE NO. 1 – MAY 2018

The following Rule Changes were approved by the ABS Rules Committee on 13 April 2018 and become **EFFECTIVE AS OF 1 MAY 2018**.

(See <http://www.eagle.org> for the consolidated version of the Guide for Classification and Certification of Managed Pressure Drilling Systems 2017, with all Notices and Corrigenda incorporated.)

Notes - The date in the parentheses means the date that the Rule becomes effective for new construction based on the contract date for construction. (See 1-1-4/3.3 of the ABS Rules for Conditions of Classification – Offshore Units and Structures (Part 1).)

FOREWORD

(Revise Foreword, as follows:)

Foreword (1 May 2018)

Managed Pressure Drilling (MPD) techniques have proven to be cost-effective, reliable, and safe when drilling difficult onshore wells as well as when drilling from mobile offshore drilling units (MODU) with a surface BOP. MPD is now widely being used as an enabling method in drilling increasingly complex and challenging offshore wells from MODUs with subsea BOPs.

As the leading global provider of offshore classification services, ABS is deeply involved in the safe and reliable use of MPD technology in global shallow-water and floating rig applications through design verification and validation. ABS has worked closely with the drilling industry to develop this Guide that specifies the classification and certification requirements for MPD systems, subsystems and equipment. This Guide is intended to be used in conjunction with the *ABS Guide for the Classification of Drilling Systems (CDS Guide)*, other applicable ABS Rules and Guides, codes and standards as referenced therein, and applicable national regulations.

For ABS classed drilling units that are in compliance with this Guide, the optional **ABS MPD™** and **ABS MPD Ready™** class notations are offered. These notations are offered to drilling units that may or may not be classed with any of ABS' **CDS** notations and sub-notations for the associated drilling systems.

ABS also offers certification services for MPD systems, subsystems, equipment and/or components provided that the applicable requirements in this Guide are fulfilled. Certification can be provided for drilling units classed with ABS as well as for non-ABS classed units.

The May 2018 update introduces the notations **ABS MPD™** and **ABS MPD Ready™**, which are pending trademark.

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.

SECTION 1 GENERAL

(Revise Subsection 1/1, as follows:)

1 General (1 May 2018)

The general requirements for conditions of Classification and Certification are contained in the *ABS Rules for Conditions of Classification – Offshore Units and Structures (Part 1)*. Additional requirements specific to managed pressure drilling (MPD) systems are contained in this Guide.

This Guide is intended to be used in conjunction with the *ABS Guide for the Classification of Drilling Systems (CDS Guide)*. The requirements contained herein and the referenced requirements from the *CDS Guide* are both to be met for classification and certification of MPD systems.

For ABS classed drilling units that are in compliance with this Guide, the optional **ABS MPD** and **ABS MPD Ready** class notations are offered. These notations are offered to drilling units that may or may not be classed with any of ABS' **CDS** notations and sub-notations for the associated drilling systems.

ABS also offers certification services for MPD systems, subsystems, equipment and/or components provided that the applicable requirements in this Guide are fulfilled. Certification can be provided for drilling units classed with ABS as well as for non-ABS classed units.

5 Classification and Class Notations

(Revise first paragraph of Subsection 1/5, as follows:)

(1 May 2018) Two optional class notations related to MPD systems (**ABS MPD** and **ABS MPD Ready**) are available for ABS classed drilling units provided the classification requirements in Sections 2 and 3, as applicable, are complied with.

(Revise Paragraph 1/5.1, as follows:)

5.1 MPD Systems (1 May 2018)

Where classification of an installed MPD systems is requested by the Owner/Operator, the MPD system may be classed and distinguished in the *ABS Record* by the notation **⊗ ABS MPD**, where approved by the Committee for service under the specified design environmental conditions.

(Revise Paragraph 1/5.3, as follows:)

5.3 “ABS MPD Ready” Systems (1 May 2018)

The notation **⊗ ABS MPD Ready** is available where MPD operations are anticipated however operationally-essential MPD equipment is not physically present. “ABS MPD Ready” means that a rig, usually a floating MODU, is pre-fitted with provisions (e.g., general piping and tie-in points pre-installed) to deploy a MPD system. When an MPD system is installed on an “ABS MPD Ready” rig, the Record may be distinguished accordingly from “ABS MPD Ready” to “ABS MPD”, where classification of this system is requested by the Owner/Operator and thereafter approved by the Committee.

9 Certification and Classification Process

(Revise second paragraph of Subsection 1/9, as follows:)

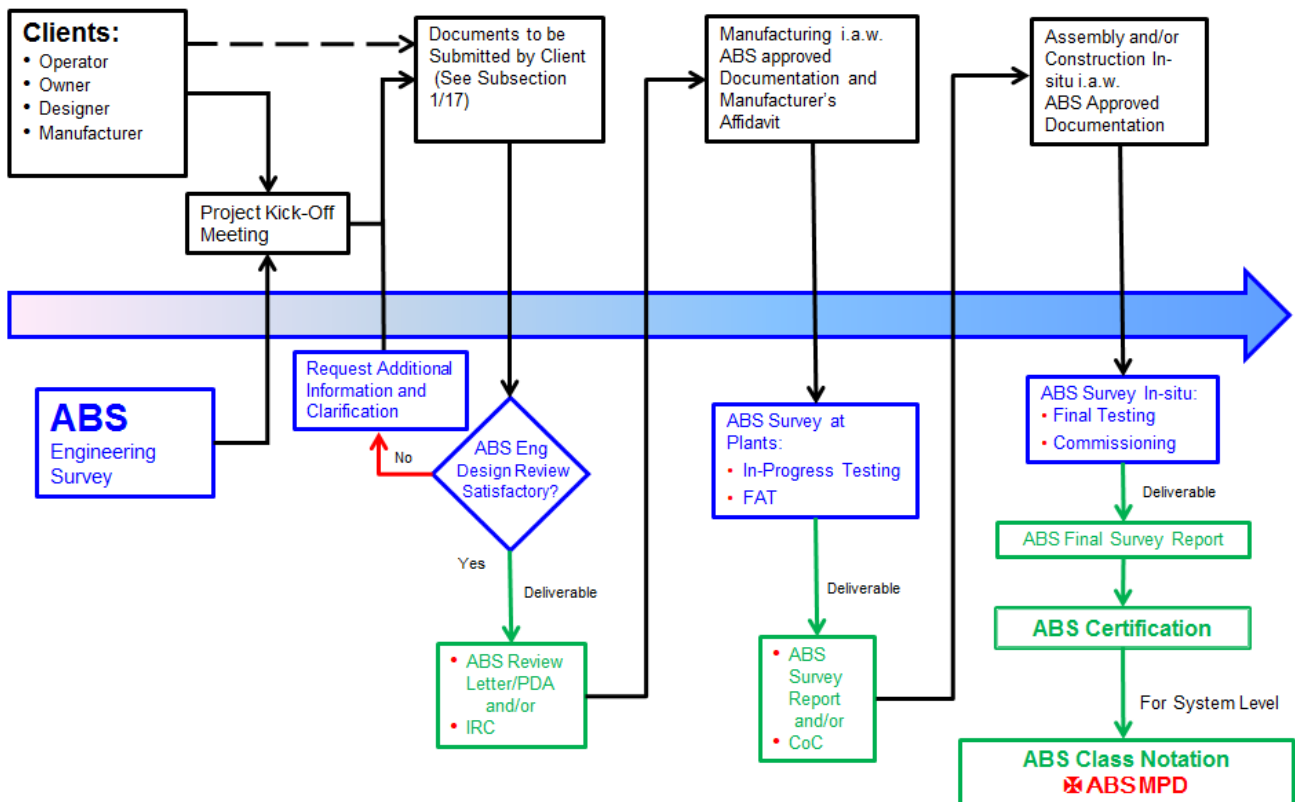
(1 May 2018) Section 1, Figure 1 shows the typical process for ABS Certification of MPD systems, subsystems, equipment and components and the way forward to Classification of MPD systems. Section 3, Table 1 identifies the typical MPD systems, subsystems and equipment that are part of the ABS Classification/Certification process. For MPD systems, subsystems, equipment and/or components not listed, the designer/manufacturer is to contact the appropriate ABS Technical office for guidance on the approval process.

For the **ABS MPD Ready** notation, the scope is only for the pre-fitted provisions on the rig, therefore, the process of “ABS Survey at Vendor’s Plant” in Section 1, Figure 1 may not apply.

Detailed ABS Classification and Certification process for drilling systems, subsystem, equipment, and/or components is contained in Section 4 of the *CDS Guide*. A brief summary of the process is provided below.

(Revise Section 1, Figure 1, as follows:)

FIGURE 1
ABS Classification/Certification Process



Note: For “**ABS MPD Ready**” Notation, “ABS Survey at Vendor’s Plant” may not apply.

SECTION 2 DESIGN OF MPD SYSTEMS, SUBSYSTEMS AND EQUIPMENT

(Revise Subsection 1/1, as follows:)

1 General (1 May 2018)

This section provides design principles and technical requirements for the classification and certification of MPD systems, subsystems and equipment. Depending on the requested notation and the specific MPD system, the requirements in this section are to be applied as follows:

- For the **ABS MPD** notation, Subsections 2/3 through 2/9 and 2/17, and the additional system specific requirements as indicated below:
 - Subsection 2/11 for Back-Pressure systems
 - Subsection 2/13 for DGD systems other than CML
 - Subsection 2/15 for CML systems
- For the **ABS MPD Ready** notation, Subsections 2/3, 2/5, 2/7, and 2/17