Guide for

Performance Standards for Corrosion Protection

January 2024

GUIDE FOR

PERFORMANCE STANDARDS FOR CORROSION PROTECTION JANUARY 2024

American Bureau of Shipping
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Foreword *(2024)*

Corrosion protection requirements are specified in SOLAS Chapter II-1/3-2 for protective coatings of dedicated seawater ballast tanks in all types of ships and protective coatings of double-side skin spaces of bulk carriers, and in SOLAS Chapter II-1/3-11 for protective coatings or corrosion resistance materials of cargo oil tanks of crude oil tankers.

The ABS *Guide for the Class Notation Coating Performance Standard (CPS)* was published in 2009 and revised in 2010 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 for vessels with contract signing on or after 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.

In 2019, this Guide superseded the ABS *Guide for the Class Notation Coating Performance Standard (CPS)* and introduced the additional ABS **CPS-COT** and **CorrResistant** notations for compliance with the SOLAS Chapter II-1/3-11 requirements for cargo oil tanks.

January 2024 Edition introduces **CPS-B** (seawater ballast tanks), **CPS-D** (double-skin spaces), **CPS-V** (void spaces) notations to denote the area to which approved protective coatings are applied.

CPS-B, **CPS-D**, **CPS-V**, **CPS-COT** and **CorrResistant** 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.

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

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SECTION 1
General

1 Scope *(2024)*

This Guide specifies the requirements for the following ABS notations shown in Section 1, Table 1.

- The **CPS-B** and **CPS-D** notations indicate compliance 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).
- The **CPS-V** notation indicates compliance with IMO Resolution MSC.244(83) for Performance Standard for Protective Coatings for Void Spaces on Bulk Carriers and Oil Tankers.
- 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 **CPS-B**, **CPS-D**, **CPS-V**, **CPS-COT** notations, ABS Type Approval of the coating system(s) is(are) required. For issuance of the **CorrResistant** notation, steels are to be procured from ABS approved mills in accordance with Section 2-1-7 of the ABS *Rules for Materials and Welding (Part 2)*.

During service, maintenance of the protective coating system is to be included in the overall ship's maintenance plan. The effectiveness of the protective coating system is to be verified during the life of a ship. If conditions of protective coatings no longer comply with requirements of 2/6 for **CPS-B**, **CPS-D** or **CPS-V** notation(s) as applicable, repairs are to be carried out in accordance with 2/4 and 2/5. If conditions of protective coatings no longer comply with requirements of 3/6 for **CPS-COT** notation, repairs are to be carried out in accordance with 3/4 and 3/5.

TABLE 1
ABS Class Notations for Corrosion Protection *(2024)*

ABS Class Notation[1]	*Applied Area*[1]	*Vessel Type*[3,4]	*References*
CPS-B	Mandatory requirements for all dedicated seawater ballast tanks	All types of SOLAS compliant vessels[2]	SOLAS Chapter II-1/3-2
CPS-D	Mandatory requirements for double-side skin spaces	SOLAS compliant Bulk Carriers	SOLAS Chapter II-1/3-2

ABS Class Notation[1]	*Applied Area*[1]	*Vessel Type*[3,4]	*References*
CPS-V	Optional requirements for void spaces	Bulk Carriers and Crude Oil Tankers	MSC.244(83)
CPS-COT	Mandatory requirements for cargo oil tanks	SOLAS compliant Crude Oil Tankers	SOLAS Chapter II-1/3-11
CorrResistant	Alternative notation to **CPS-COT** for cargo oil tanks	SOLAS compliant Crude Oil Tankers	SOLAS Chapter II-1/3-11

Notes:

1 The applied area for **B**, **D**, **V** can be combined depending on the vessel type.

2 SOLAS compliant vessels include various types of vessels not less than 500 gross tonnages, crude oil tanker not less than 5,000 tonnes deadweight, and passenger ships.

3 **CPS-B**, **CPS-D** or **CPS-V** notation also applies to non-SOLAS vessels, MODU CODE compliant vessels and other types of vessels, which can be voluntarily requested.

4 **CPS-COT** and **CorrResistant** notations are also applicable to ship-type floating production installations.

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 Marine 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 *(2024)*

This Section covers the requirements for the following **CPS** notations denoting the area to which an approved protective coating is applied:

- **CPS-B** for seawater ballast tank
- **CPS-D** for a double-skin spaces
- **CPS-V** for void spaces

The **CPS-B** and **CPS-D** notations indicate compliance with IMO Resolution MSC.215(82), required by SOLAS Chapter II-1/3-2, amended by IMO Resolution MSC.216(82). **CPS-V** notation indicates compliance with IMO Resolution MSC.244(83) for Performance Standard for Protective Coatings for Void Spaces on Bulk Carriers and Oil Tankers.

These notations may be combined depending upon the applied protective coating area and vessel type, e.g., **CPS-B**, **CPS-D**, **CPS-V** for Bulk Carriers.

CPS-B notation is mandatory for all SOLAS compliant vessels to apply approved protective coatings for dedicated seawater ballast tanks in accordance with SOLAS Chapter II-1/3-2.

CPS-D notation is mandatory for bulk carriers to apply approved protective coatings for the double-skin spaces in accordance with SOLAS Chapter II-1/3-2.

CPS-V notation is optional for vessels to apply approved protective coatings for void spaces in accordance with IMO Resolution MSC.244(83) for Performance Standard for Protective Coatings for Void Spaces on Bulk Carriers and Oil Tankers.

Upon request of the owners, these notations can be assigned to non-SOLAS vessels, MODU CODE compliant vessels and other types of vessels meeting the requirements of this Section.

2 Basis of Notation

Complying with the following is a prerequisite for receiving the ABS **CPS-B**, **CPS-D**, **CPS-V** notations:

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

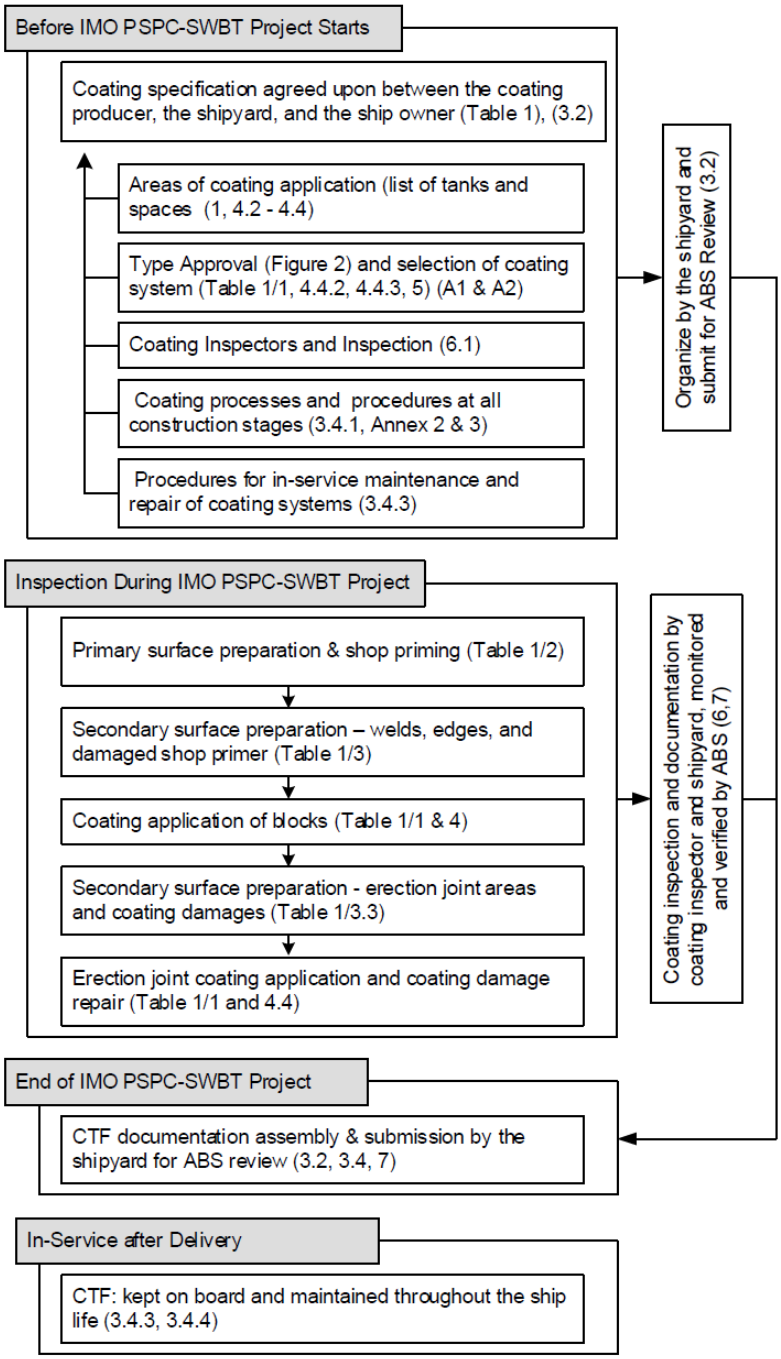
3 Process

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.

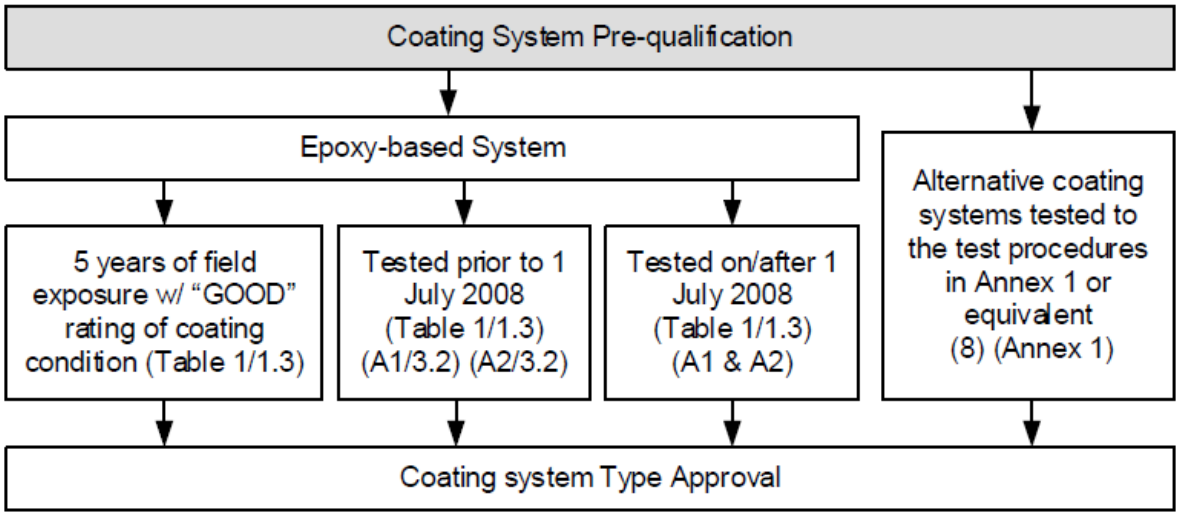
The IMO PSPC-SWBT also includes requirements for pre-qualifying IMO PSPC coating systems. The general process flow for pre-qualifying coatings is shown in Section 2, Figure 2.

FIGURE 1
Coating Process Flow



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

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



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

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 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.

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 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 During Construction *(2024)*

Prior to commencement of any coating work in any stage of a new building project, including block assembly and fabrication by subcontractors, the shipyard is to prepare and present a Tripartite Agreement (three party agreement) for ABS Engineering review. The Tripartite Agreement on inspection of surface preparation and coating processes shall be agreed and signed by the three parties involved; the builders, the coating manufacturer, and the ship owner.

A kick-off meeting is to include the job scope, the coating inspector's authorities and responsibilities, and all IMO PSPC requirements from the agreed Tripartite Agreement.

The Tripartite Agreement will be referenced by the certified coating inspector and the attending Surveyor during initial application of coatings and repairs after construction.

Prior to the vessel's delivery and issuance of the Safety Construction Certificate and Interim Class Certificate, Surveyor is to confirm that the Coating Technical File (CTF) is complete and has been updated and endorsed by the coating inspector.

7 Survey After Construction *(2024)*

Survey after contruction is to be in accordance with Section 7-9-27 of the ABS *Rules for Surveys After Construction (Part 7)*.

SECTION 3

CPS-COT Notation

1 Scope *(2024)*

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).

CPS-COT notation is mandatory for cargo oil tanks of crude oil tankers as defined in Annex I of MARPOL 73/78 and SOLAS Chapter II-1/3-11 for ships of 5,000 tonnes deadweight and above.

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 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 During Construction *(2024)*

Prior to commencement of any coating work in any stage of a new building project, including block assembly and fabrication by subcontractors, the shipyard is to prepare and present a Tripartite Agreement (three party agreement) for ABS Engineering review. The Tripartite Agreement on inspection of surface

preparation and coating processes shall be agreed and signed by the three parties involved; the builders, the coating manufacturer, and the ship owner.

A kick-off meeting is to include the job scope, the coating inspector's authorities and responsibilities, and all IMO PSPC requirements from the agreed Tripartite Agreement.

The Tripartite Agreement will be referenced by the certified coating inspector and the attending Surveyor during initial application of coatings and repairs after construction.

Prior to the vessel's delivery and issuance of the Safety Construction Certificate and Interim Class Certificate, Surveyor is to confirm that the Coating Technical File (CTF) is complete and has been updated and endorsed by the coating inspector.

7 Survey After Contruction *(2024)*

Survey after construction is to be in accordance with Section 7-9-27 of the ABS *Rules for Surveys After Construction (Part 7).*)

SECTION 4

CorrResistant Notation

1 Scope *(2024)*

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).

As an alternative to **CPS-COT** notation, **CorrResistant** notation is mandatory for cargo oil tanks of crude oil tankers as defined in Annex I of MARPOL 73/78 and SOLAS Chapter II-1/3-11 for ships of 5,000 tonnes deadweight and above.

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 During Construction *(2024)*

For surveys of hull construction, welding and fabrication are in accordance with 3-7-3/1 of the ABS *Rules for Building and Classing Marine Vessels*.

7 Survey After Construction *(2024)*

Survey after construction is to be in accordance with Section 7-9-27 of the ABS *Rules for Surveys After Construction (Part 7)*.