



**GUIDANCE FOR
THE CLASSIFICATION AND CONSTRUCTION**

PART 7. CLASS NOTATION

**VOLUME G
GUIDANCE FOR
COATING PERFORMANCE STANDARDS
2013 EDITION**

BIRO KLASIFIKASI INDONESIA



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THE CLASSIFICATION AND CONSTRUCTION**

PART 7. CLASS NOTATION

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COATING PERFORMANCE STANDARDS
2013 EDITION**

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Foreword

This Guidance, specifying the criteria for the class notation CPS (Coating Performance Standard), has been developed with the objective of promoting the effective use of protective coatings on BKI classed vessels.

This Guidance is provided to shipbuilders, ship owners, operators, naval architects and marine engineers as an aid in satisfying the protective coating requirements contained in the 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* (PSPC). This Guidance is mandatory for Common Structural Rules (CSR) vessels contracted on or after 8 December 2006.

This Guidance may be optionally applied to all other vessels.

The Guidance illustrates the application of the criteria contained in the IMO PSPC and includes reference to the IACS Procedural Requirement No. 34 which includes IACS agreed procedures related to the IMO PSPC. The Guidance contains extensive cross reference to the IMO and IACS documents.

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Section 1

General

A. Scope and Application

1. This Guidance has been developed with the objective of promoting the effective use of Type Approved protective coatings on BKI-classed vessels. The requirements as specified in this Guidance are additional to all other relevant requirements of BKI Rules and Guidelines. Vessels and marine structures designed, built, and coated in full compliance with the International Regulations, Standards, Guidelines, and recommendations as listed in C below may be assigned a class notation **CPS**, Coating Performance Standard

B. Basis of Notation

1. It is a prerequisite for receiving the class notation **CPS** that the applicable requirements of the following are fully complied with:

- SOLAS Regulation Chapter II-1/3-2, Consolidated Edition 2004, amended by IMO Resolution MSC.216(82).
- 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).
- IACS PR No. 34, IACS Procedural Requirement on Application of the IMO Performance Standard for Protective Coatings (PSPC), Resolution MSC.215(82), under IACS Common Structural Rules for Bulk Carriers and Oil Tankers.
- IACS UI SC223, IACS Unified Interpretation for Application of SOLAS Regulation II-1/3-2 Performance Standard for Protective Coatings(PSPC) for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-side Skin Spaces of Bulk Carriers, adopted by Resolution MSC.215(82) to vessels other than CSR for Bulk Carriers and Oil Tankers.
- IACS UR Z17, IACS Procedural Requirements for Service Suppliers.
- IACS Common Structural Rules for Bulk Carriers and Oil Tankers.

2. In those instances where the flag Administration has specific mandatory national regulations regarding coating protection, documentation confirming compliance with these regulations is to be submitted and considered to be fundamental to the **CPS** notation.

C. Effective Date

1. SOLAS II-1/3-2 Application

1.1 These reviews check for compliance with the requirements of Protective Coatings for Dedicated Seawater Ballast Tanks as driven by SOLAS II-1, A-1/3-2 adopted by the IMO Resolution MSC.215 (82) (hereinafter called "IMO PSPC"), as interpreted by IACS UI SC223 together with any special instructions that may have been issued by the flag Administration. Compliance with the Performance Standard of the IMO PSPC is mandatory for all ships 500 gross tonnage and above for all dedicated seawater ballast tanks arranged in all ships and double-side skin spaces arranged in bulk carriers of 150 meters in length and upwards for which :

- The building contract is placed on or after 1 July 2008; or
- In the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 January 2009; or
- Regardless of the applicability of the above two criteria, the delivery of which is on or after 1 July 2012.

1.2 This process begins upon receipt of plans and data from a client requesting BKI issuance of a Cargo Ship Safety Construction Certificate, which may be confirmed on the request for BKI classification. It ends with the return of plans to the client, stamped appropriately to indicate BKI review in accordance with this Guidance.

2. CSR Vessel Application

2.1 These reviews check for compliance with the IACS Common Structural Rules (CSR) which mandates compliance with the IMO PSPC for new CSR vessels contracted on or after 8 December 2006, as interpreted by IACS PR34. The standard is applicable to:

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

Notes:

- Coating Scheme in Seawater Ballast Tanks and Manufacturer's Technical Product Data for oil tankers and bulk carriers ≥ 500 GT constructed between 1 July 1998 and 1 July 2008 should be guideline by the coating scheme already approved under the IMO Res. A 798 (19) and IACS UI SC 122.
- As interpreted by IACS UI SC227, the following tanks are not considered to be dedicated seawater ballast tanks and are therefore exempt from the application and requirement of the IMO PSPC:
 - Ballast tank identified as "Spaces included in Net Tonnage" in the 1969, ITC Certificate; and
 - Sea water ballast tanks in passenger vessels also designated for the carriage of grey water.

Section 2

Process

A. Process Flow

1. The general coating process typically follows a process flow as shown in Figure 2.1. Each of the major coating steps is indicated along with a cross reference to the applicable section within the IMO PSPC. The various documentation and review steps necessary to demonstrate compliance with the IMO PSPC and the review steps performed by BKI as a Recognized Organization (RO) in line with IACS Procedural Requirement No. 34 are also indicated along with cross reference to the applicable section within the IMO PSPC. Unified interpretations of IMO PSPC from IACS UI SC223 refer to the same section as the IMO PSPC reference.
2. The IMO PSPC also includes requirements for pre-qualifying IMO PSPC coating systems. The general process flow for pre-qualifying coatings is shown in Figure 2.2.

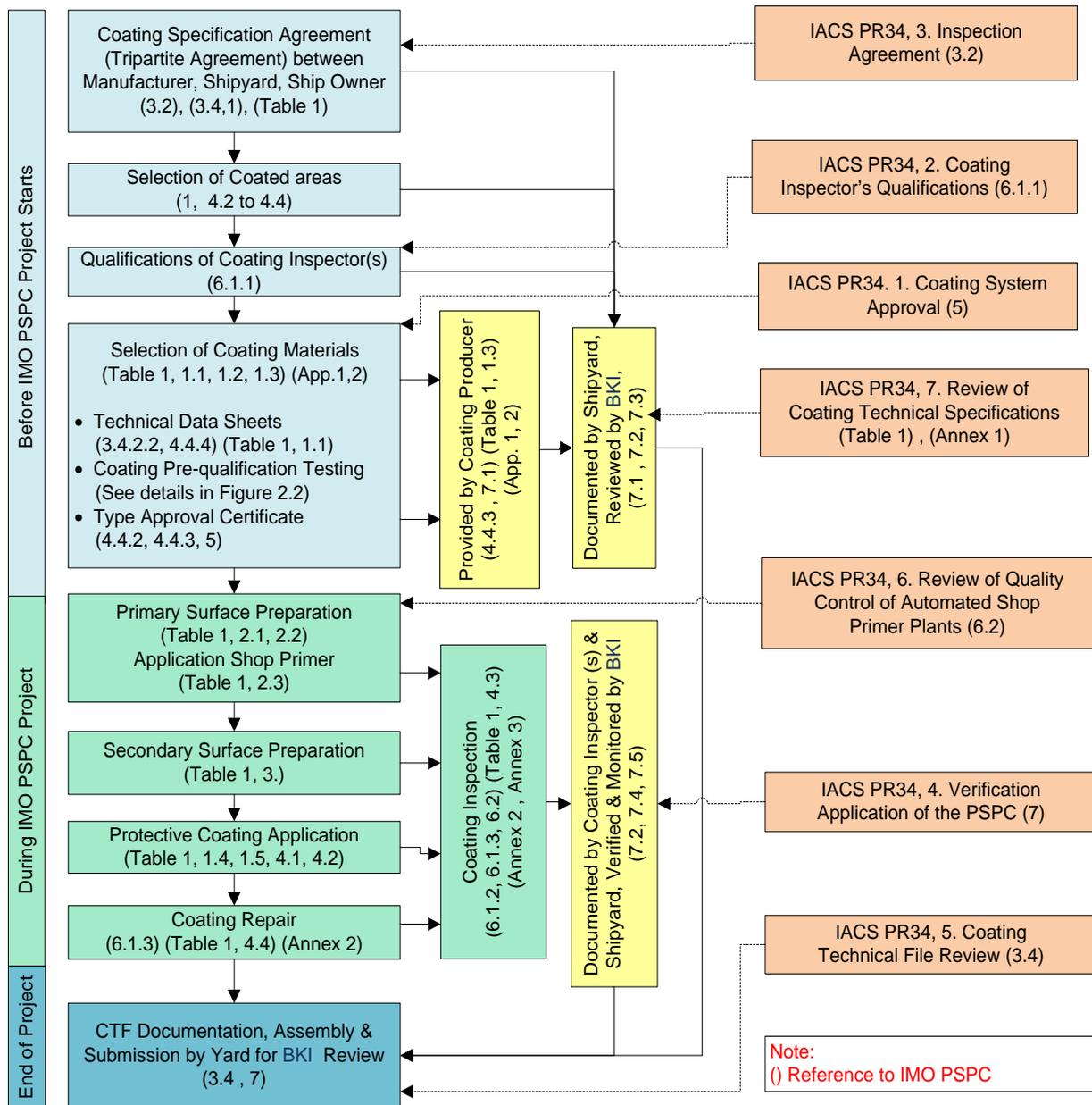


FIGURE 2.1 Coating Process Flow

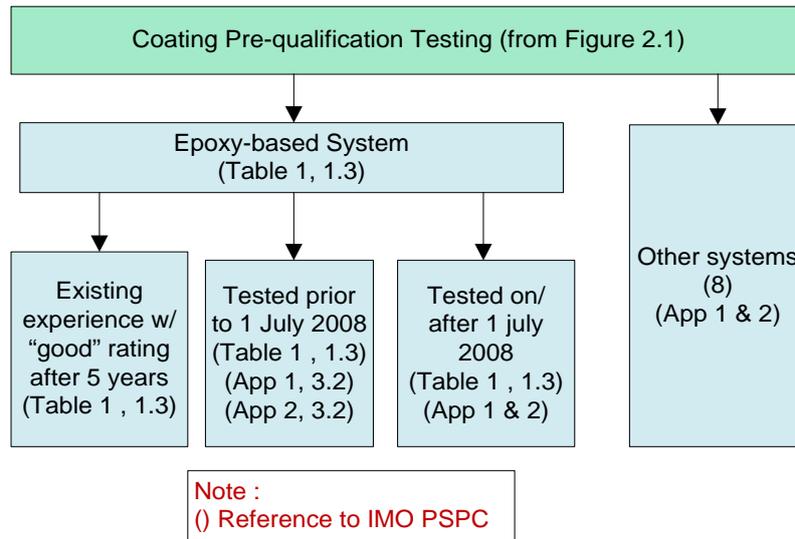


FIGURE 2.2 Coating Pre-qualification Testing Flow (Referred to in FIGURE 2.1)

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Section 3

Detailed Instruction

A. Coating Process

Detailed instructions for each of the major steps shown in FIGURES 2.1 and 2.2 are provided in this section.

1. Coating Inspection Agreement

1.1 The inspection procedure of surface preparation and coating processes is to be agreed upon between the ship owner, shipyard, and coating manufacturer and shall be presented to an BKI Head Office for review prior to commencement of any coating work on any stage of a new building and, as a minimum, shall comply with the PSPC. BKI may, if it so determines, participate in the agreement process. The agreement, also called as Tripartite Agreement, is to be included in The Coating Technical File (CTF). See IMO PSPC 3.2 and IACS PR34, Section 3.

1.2 The specification is to be in accordance with all the requirements of IMO PSPC Table 1. The specification, as defined in IMO PSPC 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.

2. Selection of Areas to be Coated

2.1 The IMO PSPC 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 Section 1, D above.

2.2 Together with the Tripartite Agreement submitted, the shipyard is to prepare and submit a list of all spaces to be coated in accordance with the IMO PSPC Sections 1, 4.2, and 4.3 to an BKI Head Office for review. The final list is to be included in the CTF per Section 4, A. 1 below.

3. Qualifications of Coating Inspector(s)

3.1 The qualifications of the coating inspector(s) are to comply with the requirements in the IMO PSPC 6.1.1. Coating inspector qualification, requirements for assistant inspectors, and equivalent qualification of coating inspectors are clarified in IACS PR34 section 2.

4. Selection of Coatings

4.1 The selection of coatings is to be made taking 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 section 4.1. The selected coatings are to be listed and cross referenced to the spaces to be coated as per A.2 above. See IMO PSPC Table 1, 1.1.

4.2 The selected coating system shall be Type Approved (per 3.1.5 below) for compliance with IMO PSPC 5, by a pre-qualification test as illustrated in Figure 2.2. See IMO PSPC Table 1, 1.3, and IACS PR34 Section 1.

5. Type Approval Certificate

5.1 A “Type Approval Certificate” which signifies that one of the options as illustrated in Figure 2.2 has been satisfied is to be obtained for each coating system selected. See IMO PSPC Section 4.4.3 and 5.

5.2 The coating manufacturer is to provide copies of the Type Approval Certificate for each coating system to be used in accordance with the IMO PSPC to the shipyard for inclusion into the CTF per Section 4, A.1 below.

6. Technical Data Sheet

6.1 Each selected coating is also to be documented by a “Technical Data Sheet” and its own verified application procedures which list technical information necessary to properly identify the coating product and application requirements. See IMO PSPC Sections 3.4.2.2, 4.4.4, and Table 1, 1.1.

6.2 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 Section 4, A.1 below.

7. Primary Surface Preparation

7.1 The primary surface preparation is to comply with IMO PSPC Table 1, 2.1 and 2.2.

7.2 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) shall 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 Section 4, A.1 below.

8. Shop Primer Application

8.1 The shop primer is to be applied in compliance with the IMO PSPC Table 1, 2.3. See IACS PR 34 section 6 for review of Quality Control of Automated Shop Primer plants and section 7.3 for common interpretations concerning shop primer.

8.2 The yard is to apply the shop primer and retain work records or documentation. Coating inspector(s) shall 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 Section 4, A.1 below.

9. Secondary Surface Preparation

9.1 The secondary surface preparation is to comply with IMO PSPC Table 1, 3.

9.2 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) shall 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 Section 4, A.1 below.

10. Protective Coating Application

10.1 The protective coating is to be applied in compliance with IMO PSPC Table 1, 1.4 and 1.5. The application conditions from IMO PSPC Table 1, 4.1 and 4.2 are to be followed. Inspection of the coating is to be performed as per A.11 below.

10.2 The yard is to apply the coatings and retain work records or documentation. Coating inspector(s) shall carry out inspections and document that the coating application is within the standard.

The documents are to be included in the CTF per Section 4, A.1 below.

11. Coating Inspection

11.1 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 Section 6.1.2.

11.2 The coating inspectors are to document the results from the inspections per IMO PSPC Section 6.1.3, Annex 2 and Annex 3. The documents are to be included in the CTF per Section 4, A.1 below.

12. Coating Repair

12.1 Any defective areas of the coatings are to be repaired per IMO PSPC Table 1, 4.4. The coating inspectors are to document the results from the inspections of the repaired areas per IMO PSPC Section 6.1.3 and Annex 2. The documents are to be included in the CTF per Section 4, A.1 below.

13. CTF Documentation and Review

13.1 The IMO PSPC mandates that each step in the coating process is performed strictly in accordance with the specifications and 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 Section 6.2 are required to illustrate the conditions and inspection results of the actual work carried out.

13.2 The assembly and submission of all documents called the Coating Technical File (CTF) is the overall responsibility of the shipyard as per IMO PSPC Section 3.4 and Section 4 of this Guidance below. The final CTF file is to be submitted to the attending BKI surveyor for review.

B. Verification Procedure

The basic verification procedure is included in IMO PSPC Section 7. The following information shall be verified by BKI prior to reviewing the CTF in support of the **CPS** notation.

1. Technical Data Sheet, Type Approval Certificate

Verify the Technical Data Sheet and Type Approval Certificates for compliance with the IMO PSPC Section 5 and IACS PR34 Section 1.

2. Coating Identification

2.1 The attending BKI Surveyor shall verify that the coating identification on representative containers is the coating identified in the Technical Data Sheet and Type Approval Certificate.

3. Coating Inspector Qualification

3.1 The attending BKI Surveyor shall verify that the coating inspector(s) and assistant inspector(s) are qualified in accordance with the qualification standards in IMO PSPC Section 6.1.1 and in IACS PR34 Section 2.

4. Coating Inspector's Reports

4.1 The attending BKI Surveyor shall verify that the coating inspector's reports of surface preparation and the coatings' application indicate compliance with the manufacturers' Technical Data Sheet, Type Approval Certificate and coating specification agreed in the tripartite agreement.

5. Implementation of Coating Inspection Requirements

5.1 The attending BKI Surveyor shall monitor implementation of the coating inspection requirements, see IMO PSPC Section 7.5 and IACS PR 34 Section 4.

C. Maintenance, Repair, and Partial Re-coating

1. The coatings are to be maintained in accordance with IMO PSPC Section 3.4.3 and 3.4.4. The relevant sections of the IMO Guidelines for coating maintenance and repair are to be applied. It is noted that these IMO Guidelines are to be developed by IMO at a future date.

2. 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 ship in accordance with IMO PSPC Section 3.4.5.

Section 4

Documentation

A. Required Specific Certification and Documentation

The following documentation and certification are required in order to receive and maintain the CPS notation:

1. Coating Technical File (CTF)

1.1 As mentioned above in 3, A, the preparation and continuous update of the CTF and the existence of the CTF endorsed by qualified coating inspector(s) onboard the vessel are the basis for the CPS notation. The CTF is to include the information listed in IMO PSPC Sections 3.4.2, 3.4.3, and 3.4.4, and in IACS PR34 Section 5. The CTF is to be available for reference by the Surveyor during new construction and during class surveys after construction. See IMO PSPC 3.4.5.

B. Assembly of Information and Retention

1. New Construction Phase

1.1 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 onboard the vessel upon delivery of the vessel. See IMO PSPC Sections 3.4.2 and 3.4.5

2. In-service Phase

2.1 The CTF is to be retained onboard and continuously updated to reflect any coating work by the ship owner or their representative qualified coating inspector(s) throughout the vessel's life for the Surveyor's verification, as necessary, at the class surveys after construction. See IMO PSPC Sections 3.4.3, 3.4.4 and 3.4.5.

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Section 5

Certification of Coating Systems

A. General

1. There are three different methodologies for the coating manufacturer to apply for approval of its coating system, namely, laboratory testing for new coating system, five years of field exposure for existing coating system, or 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 PR34 Section 1 Method D. The three methodologies have been clarified in IACS PR34 Section 1

B. Existing Epoxy Coating Systems

1. 5 Year Field Test

1.1 As indicated in IMO PSPC 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". The BKI Head Office is to review the particulars related to an existing epoxy system and, if found satisfactory, will issue a Type approval Certificate indicating adherence to the standard. See IACS PR34 "Method B".

2. Marintek B1 Approvals

2.1 Epoxy coating systems with existing satisfactory Marintek B1 test reported prior to 8 December 2006 may be applied to provide protection against corrosion. The BKI Head Office is to review the particulars related to an existing epoxy system and, if found satisfactory, will issue a Type approval Certificate indicating adherence to the standard. See IACS PR34 "Method C".

C. New Epoxy Coating Systems

1. As indicated in IMO PSPC 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 Annex 1.

2. The BKI Head Office is to review the particulars related to the testing of the epoxy system and, if found satisfactory, will issue a Type approval Certificate indicating adherence to the standard. It is noted in IMO PSPC 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 need to be satisfied. After the entry into force all aspects of the test need to be satisfied. See IACS PR34 "Method A".

D. Alternative Systems

1. Alternative systems may be certified in accordance with IMO PSPC Section 8. The BKI Head Office will review the particulars related to the testing of the alternative system (IMO PSPC Annex 1, Appendix 1 Section 3 and Appendix 2 Section 3) and, if found satisfactory, will issue a Type approval Certificate indicating adherence to the standard.

E. Certification

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

2. Upon satisfactory review of the particulars related to the testing of the coating system as indicated in B, C, or D above, and the details of the BKI type approval requirement specified in Rules for Approval of Manufacturers and Service Suppliers, if found satisfactory, BKI will issue a Type Approval Certificate after BKI survey auditing to coating manufacturer.

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Section 6

Survey After Construction

1. In order to retain the **CPS** notation, all annual, intermediate, and renewal or periodic surveys, as applicable for the various documents listed in Section 1, C above, are to be satisfactorily completed. At each periodical survey, the attending Surveyor is to verify:

- That certification and documentation is onboard as outlined in Section 4, B above.
- That approved operational procedures as outlined in Section 3, C above are maintained onboard.
- That at the time of the corresponding periodical survey (Annual, Intermediate, or Renewal), any maintenance or repair of coating that have been carried out are properly documented, as per Section 3, C.

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Annex

Abbreviations

CPS	Coating Performance Standard notation or general reference to this Guidance.
CSR	IACS Common Structural Rules
CTF	Coating Technical File
IACS	International Association of Classification Societies
IACS PR34	IACS Procedural Requirement No. 34
IACS UR Z17	IACS Procedural Requirements for Service Suppliers
IMO PSPC	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



DOCUMENT VERIFICATION FORM FOR COATING PERFORMANCE STANDARD#

Identifikasi permohonan :
 Pemohon :
 Nama kapal :
 Imo Number :
 Galangan pelaksana :

A. Document to Submitted Before Coating

1. Documentation of Agreement contain at least information below:

1.1. Technical Data Sheet of coating system used for coating application

The technical data sheet of coating system complies with IMO PSPC and it contain at least all of the following:

- 1.1.a. Product name and identification mark and/or number
- 1.1.b. Materials, components and composition of the coating system, colours
- 1.1.c. Minimum and maximum dry film thickness
- 1.1.d. Application methods, tools, and/or machines
- 1.1.e. Condition of surface to be coated (de-rusting grade, cleanness, profile, etc)
- 1.1.f. Environmental limitations (temperature and humidity)
- 1.1.g. Application procedure
- 1.1.h. Acceptance criteria and inspection

.....

1.2. Statement of Compliance or Type Approval Certificate for coating system complies with the IMO PSPC, and is one of the following from

- 1.2.a. The Society's / Classification Approval
 Certification number
 Issued by.....
 Issued date.....

1.2.b. Statement of Compliance issued by Research Institute of Marine Engineering or MARINTEK

1) Refer to IMO PSPC 6 and 7

SOC Number.....

Date Issued.....

1.2.c. Other documents deemed necessary by the Society

Document listed below

.....
.....
.....
.....

1.3. Procedure for inspection of surface preparation and coating processes¹⁾

1.4. The coating inspector have at least one of the following qualification from

1.d.1. NACE Coating Inspector Level 2

1.d.2. FROSIO Inspector Level III

1.d.3. Equivalent qualification of Inspector approved by the Society

.....
.....

B. Data to be submitted for review (Coating Technical File/CTF)

1. Copy of Statement of Compliance or type Approval

2. Copy of Technical Data Sheet including below:

2.1. Product name and identification mark and/or number

2.2. Materials, components and composition of the coating system, colours

2.3. Minimum and maximum dry film thickness

2.4. Application methods, tools, and/or machines

2.5. Condition of surface to be coated (de-rusting grade, cleanness, profile, etc)

2.6. Environmental limitation

3. Shipyard work records of coating application, including below:

3.1. Applied actual space and area (in square meters) of each compartment

3.2. Applied coating system

3.3. Time of coating, thickness, number of layers, etc.

3.4. Ambient condition during coating

3.5. Method of surface preparation

4. Procedure for inspection and repair of coating system during ship construction

5. Coating log issued by coating inspector

6. Shipyard's verified inspection report, including below:

6.1. Completion date inspection

6.2. Result of inspection

6.3. Coating Inspector's signature

1) Refer to IMO PSPC 6 and 7

6.4. Remark (if given)

.....
.....
.....

7. Procedure for in-service maintenance and repair of coating system



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LAPORAN SURVEY SURVEY REPORT

Standar Performa Pengecatan *Coating Performance Standard (CPS)*

No. Laporan Survey :
No. of Survey report

Nama kapal :
Name of Ship

No Register :
Reg. No.

Tempat Survey :
Place of Survey

Tanggal Survey :
Date of survey

Jenis Survey : INT/ AS/ IS/ DS/ SS/ OS *
Kind of survey

Pelabuhan pendaftaran :
Port of registry

No. IMO :
IMO No.:

Distinctive number or letters :

Gross Tonnage :

Nama Surveyor BKI dan Tanda-tangan
Name of Surveyor to BKI and Signature

* Coret yang tidak perlu
Delete as appropriate

Checklist for Survey of Coating Performance Standard

- | | | | | | |
|-----|---|-----------|--------------------------|-------------|--------------------------|
| 1. | Salinan kesepakatan Sistem Pengecatan
<i>Copy of Agreement on Coating System.</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 2. | Salinan Pernyataan Pemenuhan atau Sertifikat Persetujuan Tipe
<i>Copy of Statement of Compliance or Type Approval Certificate.</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 3. | Salinan lembar Data Teknik (Pabrik Pembuat Cat)
<i>Copy of Technical Data Sheet (Coating Manufacturer).</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 4. | Pengecekan bahwa pengidentifikasian cat atas (Translit)
<i>Checks that the coating identification on representative containers is consistent with the coating identified in the Technical Data Sheet and Statement of Compliance or Type Approval Certificate.</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 5. | Sertifikat Kualifikasi Inspektor cat dari NACE Coating Inspector Level 2, FROSIO Inspector Level III atau yang setara)*
<i>Qualified coating inspectors certified to NACE Coating Inspector Level 2, FROSIO Inspector Level III or equivalent)*.</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 6. | Menggunakan metode acak untuk memonitor apakah inspektor cat telah menggunakan instrumen, teknik dan metode pelaporan yang tepat dalam kaitannya dengan prosedur inspeksi.
<i>Uses a sampling method to monitor that the coating inspector is using appropriate instruments, techniques and reporting methods in accordance with the inspection procedure.</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 7. | Cek laporan Surface Preparation dan aplikasi coating dari Inspektor cat yang sesuai dengan Technical Data Sheet dari manufacturer dan Statement of Compliance atau Type Approval Certificate, dengan daftar sebagai berikut :
<i>Checks that the coating inspector's reports of surface preparation and coating application comply with the manufacturer's Technical Data Sheet and Statement of Compliance or Type Approval Certificate, following below list :</i>
<ul style="list-style-type: none"> a. Form Primary Surface Preparation (PSP) b. Form Secondary Surface Preparation (SSP) c. Form Coating Application (CA) d. Form Dry Film Thickness Measurement (DFT) e. Non-Conformity Report f. Daily Log | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 8. | Verifikasi Coating Technical File (CTF) telah direview dan ditandatangani oleh Surveyor BKI di lapangan (untuk initial survey).
<i>Verify that Coating Technical File (CTF) has been reviewed and signed by attending BKI Surveyor (for initial survey)</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 9. | Perbaikan, jika ada, telah dilaksanakan sesuai dengan rekomendasi CTF.
<i>Repair, if any, has been carried out according to CTF recommendation.</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |
| 10. | Catatan pemeliharaan, perbaikan dan pengecatan ulang sebagian didokumentasikan di dalam CTF dan disimpan di kapal.
<i>Records of maintenance, repair and partial re-coating documented in the CTF and kept on board.</i> | Ya
Yes | <input type="checkbox"/> | Tidak
No | <input type="checkbox"/> |



DOCUMENT VERIFICATION FORM FOR COATING PERFORMANCE STANDARD

-BEFORE COATING-

No. Kontrak :
 Pemohon :
 Nama kapal :
 Hull Number :
 Galangan pelaksana :
 Coating Manufacturer :

No.	Data	Comply	Not Comply	Remarks
1.	Technical Data Sheet of coating system used for coating application. The technical data sheet of coating system complies with IMO PSPC and it contain at least all of the following:			
1.a.	Product name and identification mark and/or number			
1.b.	Materials, components and composition of the coating system, colours			
1.c.	Minimum and maximum dry film thickness			
1.d.	Application methods, tools, and/or machines			
1.e.	Condition of surface to be coated (de-rusting grade, cleanness, profile, etc)			
1.f.	Environmental limitations (temperature and humidity)			
1.g.	Application procedure			
1.h.	Acceptance criteria and inspection			
2.	Statement of Compliance or Type Approval Certificate for coating system complies with the IMO PSPC, and is one of the following from			
2.a.	The Society's / Classification Approval; or			
2.b.	Statement of Compliance issued by Research Institute of Marine Engineering or MARINTEK			
3.	Procedure for inspection of surface preparation and coating processes (refer to IMO PSPC Section 6.1.2)			
4.	The coating inspector have at least one of the following qualification from			

4.a.	NACE Coating Inspector Level 2			
4.b.	FROSIO Inspector Level III			
4.c.	Equivalent qualification of Inspector approved by the Society (refer to IACS PR 34 Section 2.3)			

Note.

Tanggal pemeriksaan,

Nama dan tanda tangan surveyor pemeriksa



**DOCUMENT VERIFICATION FORM
FOR COATING PERFORMANCE STANDARD
-AFTER COATING-**

Pemohon :
 Nama kapal :
 Hull Number :
 IMO Number :
 Galangan pelaksana :
 Coating Manufacturer :

No.	Data	Comply	Not Comply	Remark
1.	Copy of Statement of Compliance or type Approval			
2.	Copy of Technical Data Sheet including below:			
2.a.	Product name and identification mark and/or number			
2.b.	Materials, components and composition of the coating system, colours			
2.c.	Minimum and maximum dry film thickness			
2.d.	Application methods, tools, and/or machines			
2.e.	Condition of surface to be coated (de-rusting grade, cleanness, profile, etc)			
2.f.	Environmental limitations (temperature and humidity)			
2.g.	Condition of surface to be coated			
3.	Shipyard work records of coating application, including below:			

3.a.	Applied actual space and area (in square meters) of each compartment			
3.b.	Applied coating system			
3.c.	Time of coating, thickness, number of layers, etc			
3.d.	Ambient condition during coating			
3.e.	Method of surface preparation			
4.	Procedure for inspection and repair of coating system during ship construction			
5.	Coating log issued by coating inspector			
6.	Shipyards verified inspection report, including below:			
6.a.	Completion date inspection			
6.b.	Result of inspection			
6.c.	Coating Inspector's signature			
6.d.	Remark (if given)			
7.	Procedure for in-service maintenance and repair of coating system			
8.	CTF has been reviewed and signed by attending BKI Surveyor			
9.	Complete survey report (F....)			

Tanggal pemeriksaan,	Nama dan tanda tangan surveyor pemeriksa
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