

# ESP Code

## Amended Rules

Rules for the Survey and Construction of Steel Ships Part B

## Reason for Amendment

IMO Resolution A. 1049(27) (2011 ESP Code) regulates the requirements of the Enhanced Survey Programme for bulk carriers and oil tankers and it has already been incorporated in the Rules for the Survey and Construction of Steel Ships Part B.

The resolution includes coating condition criteria for ballast tanks and further specifies that internal inspections are required at annual intervals in cases where said coating conditions fail to satisfy the criteria.

Although different coating condition criteria have been applied to bulk carriers and oil tankers, M/V STELLAR DAISY accident in 2017 has triggered a momentum to apply the same criteria regardless of the ship type. Finally, at the 106<sup>th</sup> Session of its Maritime Safety Committee (MSC106) held in November 2022, the IMO amended the ESP Code to revise the coating condition criteria for the ballast tanks of bulk carriers as well as to clarify some other requirements. This amendment was adopted as Resolution MSC.525(106).

IACS, in turn, also reviewed its relevant Unified Requirements (URs) to incorporate Resolution MSC.525(106) and the IACS UR Z10 series was amended in March 2023.

Therefore, relevant requirements in the NK Rules are amended in accordance with UR Z10.1 (Rev. 25), Z10.2 (Rev. 37), Z10.4 (Rev. 18) and Z10.5 (Rev. 20).

## Outline of Amendment

- (1) Amend the coating condition which requires that internal inspections of ballast tanks on bulk carriers be carried out at annual intervals from “POOR” to “less than GOOD (FAIR or POOR)”.
- (2) Specify the requirement that internal inspections should be carried out at annual intervals for double-side skin void spaces bounding cargo holds for bulk carriers exceeding 20 years of age and of 150 m in length and upwards whose coating condition is found to be in POOR condition.
- (3) Amend the definition of oil tankers to exclude ships carrying oil in independent tanks not part of the ship’s hull such as asphalt carriers.
- (4) Stipulate that the pressure test of cargo tanks carried out by the ship’s crew under the direction of the master is to be conducted prior to overall survey or close-up surveys.

“Rules for the survey and construction of steel ships” has been partly amended as follows:

## **Part B CLASS SURVEYS**

### **Chapter 1 GENERAL**

#### **1.3 Definitions**

##### **1.3.1 Terms\***

Sub-paragraphs (11) and (12) have been amended as follows.

- (11) “Oil tankers” are ships constructed or adapted for the carriage of oil in bulk ~~and include in cargo tanks forming an integral part of the ship’s hull, including~~ chemical carriers intended to carry oil in bulk and combination carriers which are designed to carry either oil or solid cargoes in bulk, such as ore/oil carriers and ore/bulk/oil carriers but excluding ships carrying oil in independent tanks not part of the ship’s hull such as asphalt carriers.
- (12) “Double hull oil tankers” are ships which belong to oil tankers specified in (11) above, which have the cargo tanks forming an integral part of the ship’s hull and are protected by a double hull which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces, and includes existing double hull tankers not complying with 3.2.4, **Part 3 of the Rules for Marine Pollution Prevention Systems** but having double hull structure.

## Chapter 3 ANNUAL SURVEYS

### 3.2 Annual Surveys for Hull, Equipment, Fire Extinction and Fittings

#### 3.2.4 Internal Examinations of Spaces and Tanks\*

Table B3.4 has been amended as follows.

Table B3.4 Internal Examinations of Spaces and Tanks

Items	Examination
(Omitted)	
Requirements for Double Skin Bulk Carriers	
1 Engine room and boiler room	(1) An internal examination is to be carried out.
2 Ballast tanks	(1) For bulk carriers over 5 <i>years</i> of age, an internal examination of the tank(s), of which an internal examination is required as a consequence of the last Intermediate Survey or Special Survey, is to be carried out.
3 Cargo holds	(1) For bulk carriers over 10 <i>years</i> and up to 15 <i>years</i> of age, an internal examination of two selected cargo holds is to be carried out. (2) For bulk carriers over 15 <i>years</i> of age, an internal examination of all cargo holds is to be carried out.
4 Double side skin void spaces	(1) For bulk carriers over 20 <i>years</i> of age and of 150 <i>m</i> in length and upwards, an <u>internal examination of the void spaces, of which an internal examination is required as a consequence of the last Intermediate Survey or Special Survey, is to be carried out.</u>
(Omitted)	

### 3.2.6 Thickness Measurements

Table B3.6 has been amended as follows.

Table B3.6 Thickness Measurements

Items	Note
(Omitted)	
<u>Requirements for Bulk Carriers other than Double Skin Bulk Carriers</u>	
1 Structural members in ballast tanks	(1) When extensive corrosion is found in the examination of ballast tanks specified in <b>Table B3.4</b> which is required for bulk carriers <u>other than double skin bulk carriers</u> over <i>5 years</i> of age, thickness measurements are to be carried out to the satisfaction of the Surveyor. Where substantial corrosion is found, additional thickness measurements are to be carried out according to the provisions of <b>5.2.6-5</b> .
2 Hatch covers and hatch coamings	(1) When deemed necessary by the Surveyor as a consequence of the internal examination required in <b>Table B3.4</b> or the close-up survey required in <b>Table B3.5</b> for <u>bulk carriers other than double skin bulk carriers</u> , thickness measurements are to be carried out to the satisfaction of the Surveyor. Where substantial corrosion is found, additional thickness measurements are to be carried out according to the provisions of <b>5.2.6-5</b> .
3 Structural members in cargo holds	
<u>Requirements for Double Skin Bulk Carriers</u>	
1 <u>Structural members in ballast tanks</u>	(1) When extensive corrosion is found in the examination of ballast tanks specified in <b>Table B3.4</b> which is required for double skin bulk carriers over <i>5 years</i> of age, thickness measurements are to be carried out to the satisfaction of the Surveyor. Where substantial corrosion is found, additional thickness measurements are to be carried out according to the provisions of <b>5.2.6-5</b> .
2 <u>Double side skin void spaces</u>	(1) When extensive corrosion is found in the examination of void spaces specified in <b>Table B3.4</b> which is required for double skin bulk carriers over <i>20 years</i> of age and of <i>150 m</i> in length and upwards, thickness measurements are to be carried out to the satisfaction of the Surveyor. Where substantial corrosion is found, additional thickness measurements are to be carried out according to the provisions of <b>5.2.6-5</b> .
3 <u>Hatch covers and hatch coamings</u>	(1) When deemed necessary by the Surveyor as a consequence of the close-up survey required in <b>Table B3.5</b> for double skin bulk carriers, thickness measurements are to be carried out to the satisfaction of the Surveyor. Where substantial corrosion is found, additional thickness measurements are to be carried out according to the provisions of <b>5.2.6-5</b> .
(Omitted)	

## Chapter 4 INTERMEDIATE SURVEYS

### 4.2 Intermediate Surveys for Hull, Equipment, Fire Extinction and Fittings

#### 4.2.4 Internal Examinations of Spaces and Tanks\*

Table B4.2 has been amended as follows.

Table B4.2 Internal Examinations of Spaces and Tanks

Items	Examinations
(Omitted)	
Requirements for Bulk Carriers	
1 Engine room and boiler room	(1) An internal examination is to be carried out on all aspects.
2 Ballast tanks	(1) For bulk carriers over 5 <i>years</i> and up to 10 <i>years</i> of age, an internal examination of representative ballast tanks and combined cargo/ballast tanks, if any, is to be carried out. Where a poor coating condition, corrosion or other defects are found in a ballast tank or where a protective coating has not been applied from the time of construction, the examination is to be extended to other ballast tanks of the same type. (2) If such examinations reveal no visible structural defects, the examination may be limited to a verification that the corrosion prevention system remains effective. (3) For ballast tanks where a protective coating is found in <del>poor</del> <u>less than good</u> condition, and it is not renewed or where a protective coating has not been applied from the time of construction, excluding double bottom tanks, an internal examination is to be carried out at annual intervals. For double bottom ballast tanks in this condition, where considered necessary by the Surveyor, an internal examination is to be carried out at annual intervals.
3 Cargo holds	(1) For bulk carriers over 5 <i>years</i> of age, an internal examination of all cargo holds is to be carried out.
(Omitted)	

## Chapter 5 SPECIAL SURVEYS

### 5.2 Special Surveys for Hull, Equipment, Fire Extinction and Fittings

#### 5.2.4 Internal Examinations of Spaces and Tanks\*

Sub-paragraph -4 has been renumbered to Sub-paragraph -5, and Sub-paragraph -4 has been added as follows.

**1** At Special Surveys, examinations of structures and fittings such as piping in tanks and spaces are to be carried out carefully paying due attention to items (1) through (7) below.

- (1) Areas sensitive to corrosion (on parts such as structural members, piping, and hatch covers) in cargo holds where cargoes highly corrosive to steel such as logs, salt, coal, and sulphide ore have been loaded
- (2) Areas sensitive to deterioration by heat such as plating under boilers
- (3) Structurally discontinuous portions such as corners of hatchway openings on deck, openings (including side scuttles), cargo port, etc. on shell
- (4) Condition of coating and corrosion prevention system if applied
- (5) Condition of striking plates under sounding pipes
- (6) Condition of deck covering (e.g. cement)
- (7) Locations on which defects such as cracking, buckling, and corrosion have been found in similar ships or similar structures

**2** At Special Surveys, internal examinations of tanks or spaces listed in **Table B5.1** are to be carried out paying attention to the items in -1 above.

**3** At Special Surveys for tankers and ships carrying dangerous chemicals in bulk with integral tanks, in addition to -1 and -2 above, an internal examination of tanks and spaces listed in **Table B5.2** is to be carried out. Tanks and spaces identified as suspect areas at previous surveys are to be examined. The examination of the coating condition in ballast tanks for oil tankers and ships carrying dangerous chemicals in bulk is to be based on the coating criteria defined by the Society. However, for ships carrying dangerous chemicals in bulk, stainless steel tanks may be exempted from internal examinations where deemed appropriate by the Society.

**4** At Special Surveys for bulk carriers, in addition to -1 and -2 above, an internal examination of tanks and spaces listed in **Table B5.3** is to be carried out.

**45** At Special Survey No. 3 and subsequent special surveys, in addition to -1 to -3, structural downflooding ducts and structural ventilation ducts are to be internally examined.

Table B5.3 has been added as follows.

**Table B5.3 Additional Requirements of Internal Examinations for Bulk Carriers**

<u>Special Survey</u>	<u>Tanks and spaces subject to examination</u>	<u>Notes</u>
<u>Requirements for Bulk Carriers other than Double Skin Bulk Carriers</u>		
1 <u>All Special Surveys</u>	1 <u>Ballast tanks</u>	(1) <u>As a result of internal examinations, ballast tanks (excluding double bottom tanks) with conditions shown in (a) or (b) require an internal examination to be carried out at annual intervals.</u> (a) <u>The protective coating is found in less than GOOD condition and is not repaired to the satisfaction of the Surveyor.</u> (b) <u>The protective coating has not been applied from the time of construction.</u>
<u>Requirements for Double Skin Bulk Carriers</u>		
1 <u>All Special Surveys</u>	1 <u>Ballast tanks</u>	(1) <u>As a result of internal examinations, ballast tanks (excluding double bottom tanks) with conditions shown in (a) or (b) require an internal examination to be carried out at annual intervals.</u> (a) <u>The protective coating is found in less than GOOD condition and is not repaired to the satisfaction of the Surveyor.</u> (b) <u>The protective coating has not been applied from the time of construction.</u>
	1 <u>Double side skin void spaces</u>	(1) <u>As a result of internal examinations, double-side skin void spaces bounding cargo holds for bulk carriers exceeding 20 years of age and of 150 m in length and upwards with conditions shown in (a) or (b) require an internal examination to be carried out at annual intervals.</u> (a) <u>The protective coating is found in POOR condition and is not repaired to the satisfaction of the Surveyor.</u> (b) <u>The protective coating has not been applied from the time of construction.</u>

### 5.2.7 Pressure Tests\*

Sub-paragraph -3 has been amended as follows.

3 At Special Surveys for oil tankers and ships carrying dangerous chemicals in bulk with integral tanks, notwithstanding the provisions of -2 above, a pressure test is to be carried out for tanks listed in Table B5.23-1. With respect to the pressure tests for the cargo tanks of tankers and ships carrying dangerous chemicals in bulk, when pressure tests are conducted in the presence of the Master or any other representative personnel of the ship, such pressure tests may be regarded as the pressure tests required for Special Surveys at the discretion of the Surveyor provided the following (1) to (56) conditions are complied with. For pressure tests conducted in the presence of the master or any other representative personnel, guidance is specified in Annex 5.2.7. For double hull oil tankers and ships carrying dangerous chemicals in bulk with integral tanks, any testing of double bottom tanks and other watertight compartments not designed to carry liquids may be omitted, provided that satisfactory internal and/or external examinations are carried out.

- (1) The procedure (including information such as fill heights, the tanks being filled and the bulkheads being tested) for the pressure test has been submitted by the owner and reviewed by the Society prior to the pressure test being carried out.
- (2) The pressure test is carried out prior to internal examination or close-up survey.
- (3) The pressure test is carried out at the time of the special survey and not more than 3 months prior to the date on which the internal examination or close-up survey is completed.
- (24) ~~There~~ The pressure test has been satisfactorily carried out and there is no record of leakage, distortion or substantial corrosion that would affect the structural integrity of the tank.
- (3) ~~The pressure test has been satisfactorily carried out within special survey window not more than 3 months prior to the date of the survey on which the internal examination or close-up survey is completed.~~
- (45) The satisfactory results of the pressure test are recorded in the ship's logbook.
- (56) The internal and external condition of the tanks and associated structure are found satisfactory by the Surveyor at the time of the internal examination and close-up survey.