

Main changes in BV Rules for Steel Ships

Main changes in Bureau Veritas Rules for the Classification of Steel Ships (January 2018 edition, into force on January 1st, 2018), regarding the previous edition (July 2017) are described as follows.

Rules History

January 2018 edition into force on January 1st, 2018 Contents	Previous edition: July 2017 into force on July, 1st 2017 Contents
Amendments to Parts A, B, C, D, E and F [NR 467 DT Amd 014 E January 2018]	
Part A - Classification and Surveys [NR 467.A1 DT R14 E July 2017]	Part A - Classification and Surveys [NR 467.A1 DT R14 E July 2017]
Part B - Hull and Stability [NR 467.B1 DT R09 E July 2017]	Part B - Hull and Stability [NR 467.B1 DT R09 E July 2017]
Part C - Machinery; Electricity, Automation and Fire Protection [NR 467.C1 DT R09 E July 2017]	Part C - Machinery; Electricity, Automation and Fire Protection [NR 467.C1 DT R09 E July 2017]
Part D - Service Notations [NR 467.D1 DT R09 E July 2017]	Part D - Service Notations [NR 467.D1 DT R09 E July 2017]
Part E - Service notations for Offshore Service Vessels and Tugs [NR 467.E1 DT R00 E July 2017]	Part E - Service notations for Offshore Service Vessels and Tugs [NR 467.E1 DT R00 E July 2017]
Part F - Additional Class Notations [NR 467.F1 DT R09 E July 2017]	Part F - Additional Class Notations [NR 467.F1 DT R09 E July 2017]

Classification and Surveys - PART A

Implementation of IACS Unified Requirements

- UR Z10.2 (rev. 33) and UR Z10.5 (rev. 16):
 - New requirements for SCF for bulk carriers – Pt A, Ch 4, Sec 2
- UR Z10.4 (rev. 14):
 - New requirements for SCF for oil tankers – Pt A, Ch 4, Sec 3
- UR Z23 (rev. 6):
 - New requirements for SCF for hull survey for new construction – Pt A, Ch 3, Sec 7
- UR Z25 (new):
 - New requirements for periodic surveys of fuel installations on ships other than liquefied gas carriers utilizing gas or other low flash point fuels – Pt A, Ch 3, Sec 7.

Service notations

- New services notations:
 - **Liquefied gas carrier - FSRU and FSRU** (Reference is made to NR645) – Pt A, Ch 1, Sec 2 and Ch 4, Sec 5
- Existing service notations :
 - **Self-unloading bulk carrier ESP** – possibility to add service features “heavycargo” and “nonhomload” – Pt A, Ch 1, Sec 2.

Additional service features

- New additional service feature:
 - **(Block-loading)** for bulk carrier ESP with CSR and BC-A notations (Reference is made to CSR Rules) – Pt A, Ch 1, Sec 2
 - **SW-Registry** (about computerized systems – reference is made to Pt 3, Ch 3, Sec 3) – Pt A, Ch 1, Sec 2
- Existing additional service feature:
 - **(LPG), (CNG) or (LNG)**: additional notations to be added after “dualfuel” or “gasfuel” – Pt A, Ch 1, Sec 2
 - **SPxxx SRTP**: changes in conditions of application – Pt A, Ch 1, Sec 2.

Additional class notations

- New additional class notations:
 - **STABLIFT** (concerning stability during lifting operations) – Pt A, Ch 1, Sec 2
- Existing additional class notations:
 - **GAS PREPARED (AE)** and **GAS PREPARED (B)** (the additional notation **GAS PREPARED (AEB)** is split into these 2 notations)– Pt A, Ch 1, Sec 2.

Miscellaneous

- Reference of requirements for **REGAS** notation (NR 645 instead of NR 542) – Pt A, Ch 1, Sec 2
- Delete references in Tab 1 for **SPxxx** notation – Pt A, Ch 1, Sec 2
- Correct rule requirement in Tab 1 for **POLAR CATxxx** notations – Pt A, Ch 1, Sec 2
- Add missing reference to requirements of surveys for LNG bunkering ships – Pt A, Ch 1, Sec 2 and Ch 4, Sec 5
- Correct wording and add missing reference to requirements for maintenance of self-elevating notation (for OCB, OCV and OSV) – Pt A, Ch 1, Sec 2
- Add missing reference to requirements for maintenance of pipe laying notation – Pt A, Ch 1, Sec 2 and Ch 4, Sec 8
- Remove reference to standby rescue for special service notation– Pt A, Ch 1, Sec 2
- Remove navigation notations for yacht and add a reference to NR 500 – Pt A, Ch 1, Sec 2
- Modify the definition of crew boat and remove 2 notes – Pt A, Ch 1, Sec 2
- Add the mandatory assignment of **SDS** notation to semi-submersible cargo ship – Pt A, Ch 1, Sec 2
- Modify the definition of **SDS** – Pt A, Ch 1, Sec 2
- Add missing reference to requirements for maintenance of **BATTERY SYSTEM** notation – Pt A, Ch 1, Sec 2
- Modify the conditions for requirements of **SRTP** to complete **SPxxx** – Pt A, Ch 1, Sec 2
- Add missing reference to requirements for maintenance of **ELECTRIC HYBRID** notation – Pt A, Ch 1, Sec 2
- Add missing bullet for last paragraph of **STABLIFT** – Pt A, Ch 1, Sec 2
- Add missing reference to diving systems and pipe laying – Pt A, Ch 4, Sec 8
- Modify the requirement for annual survey of cable laying ship – Pt A, Ch 4, Sec 8
- Add the missing article for pipe paying ship surveys – Pt A, Ch 4, Sec 8
- Add the new **ELECTRIC HYBRID** notation in the Table 1 – Pt A, Ch 5, Sec 1
- Add new survey requirements (annual and renewal) for DP systems – Pt A, Ch 5, Sec 10
- Correct the mistyping **CBRN-WAHDOWN** in the general paragraph of CBRN ships – Pt A, Ch 5, Sec 10
- Correct the mistyping **CBRN-WASHDOWN** in the last class renewal survey requirement – Pt A, Ch 5, Sec 10
- Add the notation **ELECTRIC HYBRID** in the list at the beginning of section and new article for corresponding surveys – Pt A, Ch 5, Sec 10.

Hull Structure - PART B**Ordinary stiffeners plastic section modulus**

- General update of the calculation method as per IACS UR I – Pt B, Ch 4, Sec 3, [3.4.3].

Pressure on exposed deck

- Clarification of exposed deck pressure application – Pt B, Ch 5, Sec 5, [3].

Sea chest design pressure

- Introduction of a minimum pressure due to the cleaning system – Pt B, Ch 5, Sec 5, [3].

Still water deck pressure

- Values indicated in tables are now minimum values – Pt B, Ch 5, Sec 6, [7] & [8].

Buckling of stiffeners perpendicular to the compression

- Deleted obsolete requirement – Pt B, Ch 7, Sec 2, [4.4.2].

Allowable contact pressure at connexion between pillars and decks

- New requirement – Pt B, Ch 7, Sec 3, [7.2.7].

Calculation models for primary supporting members subjected to wheeled loads

- Clarification of the applicability of 3D beam models or finite element models depending on the ship length – Pt B, Ch 7, App 2.

Stern impact pressure

- Correction for stern slamming pressure calculation – Pt B, Ch 8, Sec 2, [4.2.1].

Propeller shaft bossing

- Clarification – Pt B, Ch 8, Sec 2, [6.5.1].

Doors and windows in side shell

- Verification of these openings when located partly or totally below the deepest equilibrium waterline – Pt B, Ch 8, Sec 6, [2.1], [4.2.3], [5.1.1] and Pt B, Ch 8, Sec 10, [3.3].

Lower Rudder stock ends

- Deletion of criteria for minimum diameter of massive part – Pt B, Ch 9, Sec 1, [5.3.4].

Nozzles web rings

- Removed minimum number of rings but added section modulus criteria – Pt B, Ch 9, Sec 1, [10.1.2].

Welding of ordinary stiffeners with primary members

- Clarification of reference thickness – PT B, Ch 11, Sec 1, [2.3].

Tank testing

- General update according to IACS UR S14 Rev.6 - Pt B, Ch 11, Sec 3.

Machinery - PART C***Additional service feature SPxxx or SPxxx-capable***

- Update/clarification of applicable requirements according to the number of persons on board.

Exhaust gas cleaning systems

- Update in line with IACS UR M77 – Pt C, Ch 1, Sec 10, [18.5.4].

Steering gear design

- Clarification of steering gear control system requirements in line with IACS UI SC94 Rev.2 – Ch 1, Sec 11, [2.3], [2.4] and [2.7].

Electricity and Automation - PART C***Battery ventilation – Ch 2***

- Clarification for the dimensioning of natural ventilation for batteries – Ch 2, Sec 11 [6.5.2].

Fire Protection, Detection and Extinction - PART C

Containment of fire – Ch 4, Sec 5

- Included IMO interpretation regarding the structural fire protection requirements for a navigation locker adjacent to the wheelhouse (IMO MSC.1/Circ.1581).

Protection of vehicle, special category and ro-ro spaces

- Extinguishing fixed water based fire extinguishing systems – Pt C, Ch 4, Sec 12, [5.1.2].

Service Notations - PART D

Steering gear design - Oil Tankers, FLS Tankers, chemical tankers and gas carriers

- Clarification of steering gear control system requirements in line with IACS UI SC94 Rev.2 – Ch 7, Sec 4, [4]
 - Also applicable to **gas carriers** and **chemical tankers**, by reference to rules applicable to tankers.

Oil tankers – Ch 7

- Rewording of several requirements for clarification.

Chemical tankers – Ch 8

- Clarification of the localization requirement for chain lockers (out of hazardous areas) – Ch 8, Sec 3 [1.1.2]
- Temperature indication limit changed from 45°C to 90°C – Ch 8, Sec 7, [1.1.3]
- Clarification of the NDT requirements for cargo piping of chemical tankers – Ch 8, Sec 5.

Liquefied gas carriers – Ch 9

- Clarification of applicable requirements for liquefied gas carriers using LPG as fuel – Ch 9, Sec 1, [1.1]
- Clarification of requirements for the secondary barrier – Ch 9, Sec 4 [2.4.1]
- Clarification of requirements of PRV for prismatic tanks as per IACS UI GC19 – Ch 9, Sec 8 [4.1.1]
- Clarification of requirements for cargo tank's high level alarm as per IACS UI GC18 – Ch 9, Sec 13 [3.1.6]
- Temperature indication devices requirement clarified (Ch9, Sec 13, [5.1.2] moved to [7.2.3])
- Clarification of the assumptions to be considered when assessing the inertial pressure of liquefied gas tanks. The pressure in type A tanks is to be assessed considering a 3D calculation – Ch 9, App 1.

Passenger ships – Ch 11

- Flooding detection systems for passenger ships carrying 36 or more persons – Ch 11, Sec 5, [1.3].

Ro-ro passenger ships – Ch 12

- Socket outlets in garage spaces to be IP56 – Ch 12, Sec 3 [3.4]
- Flooding detection systems for passenger ships carrying 36 or more persons – Ch 12, Sec 4, [1.4].

Pontoon-crane – Ch 14

- Reference is made to Pt E, Ch 8, Sec 3 for stability criteria during lifting operations – Ch 14, Sec 2, [2.2]
- Reference is made to Pt E, Ch 8, Sec 4 for structural assessment of the foundations of the lifting appliance - Ch 14, Sec 2, [5.3].

Fishing vessels – Ch 15

- Sill heights are specified (ships not covered by Load Line) – Ch 15, Sec 1, [3.4.1].

Notations for OSV and Tugs - PART E

Tugs – Ch 1

- General updates and fire safety – Section 1
- General update of stability criteria – Section 2
- Clarifications / corrections – Section 2.

Anchor Handling vessels – Ch 2

- Update of stability requirements

Lifting units – Ch 8

- Implementation of IMO Intact Stability code amendments (MSC 97/22/Add.1) – Ch 8, Sec 3
- New notation **STABLIFT** applicable to any ship using a crane with significant heeling moment – Ch 8, Sec 3
- New alternative damage stability criteria during lifting operations (non mandatory).

Semisubmersible cargo ships – Ch 9

- Additional class notation **SDS** and damage stability assessment is mandatory – Ch 9, Sec 3
- Clarification of ballast pressure calculation in case of overflow tanks – Ch 9, Sec 4, [1].

Accommodation units – Service feature SPxxx or SPxxx-capable – Ch 11

- Clarification of threshold number of persons on board for definition of applicable requirements – Ch 11, Sec 4, Tab 1.

Additional Class Notations - PART F***AUT-UMS – Ch 3***

- Clarification of requirements for fire detection in boiler supply casings and exhausts as per IACS UI SC283 – Pt F, Ch 3, Sec 1 [3.2].

SYS-COM – Ch 4, Sec 3

- Update and clarifications
- Added security recommendations.

Propellers in ice – Ch 8, Sec 3

- Correction of typo mistake in the definition of force for load case applicable to open and to ducted propellers (Tab 4 and Tab 5, load case 5).

Cleanship – Ch 9, Sec 3

- Update in line with IACS UR M77 – Ch 9, Sec 2, [2.9.5].

Dynamic Positioning (DYNAPOS) – Pt F, Ch 11, Sec 6

- General update in line with IMO MSC.1 Circ.1580.

Cold Weather Conditions – Pt F, Ch 11, Sec 11

- The weight distribution of ice accretion is to be applied on the full length of the ship as requested by the Polar Code / Pt F, Ch 11, Sec 11, [5.2.2].

HEL – Pt F, Ch 11, Sec 20

- Clarification of applicable scope of CAP 437.