

Main changes in NR483 Rules for the Classification of Naval Ships

The main changes in Bureau Veritas Rules for the Classification of Naval Ships, January 2024 edition, with respect to the previous edition (October 2022) are as follows.

Rules history

| January 2024 edition entry into force on January 1, 2024 Contents | Previous edition: October 2022 entry into force on October 1, 2022 Contents |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Part A - Classification and Surveys [NR 483.A1 DT R05 E January 2024] | Part A - Classification and Surveys [NR 483.A1 DT R04 E October 2022] |
| Part B - Hull and Stability [NR 483.B1 DT R05 E January 2024] | Part B - Hull and Stability [NR 483.B1 DT R04 E October 2022] |
| Part C – Machinery, Systems and Fire Protection [NR 483.C1 DT R05 E January 2024] | Part C – Machinery, Systems and Fire Protection [NR 483.C1 DT R04 E October 2022] |
| Part D - Service Notations [NR 483.D1 DT R05 E January 2024] | Part D - Service Notations [NR 483.D1 DT R04 E October 2022] |
| Part E - Additional Class Notations [NR 483.E1 DT R05 E January 2024] | Part E - Additional Class Notations [NR 483.E1 DT R04 E October 2022] |

PART A – Classification and Surveys

Additional Class Notations

▪ New additional class notations

| Notation | Description | Reference |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| CBRN | New additional class notations covering CBRN protection for naval ships: CBRN and CBRN-AIR BLAST RESISTANCE | Ch 1, Sec 2, [6.11] & Tab 1 Ch 5, Sec 10 |
| INTERNAL CONNECTIVITY | New additional class notation applicable to ships for which the on-board network infrastructure enables internal connectivity | Ch 1, Sec 2, [6.15.4] & Tab 1 |

▪ Existing additional class notations

| Notation | Description | Reference |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| FIRE | Re-organization of the additional class notation FIRE in order to include multilayer fire testing (low flame-spread characteristics) and remote-release requirements for doors required to remain open for smoke evacuation purposes | Ch 1, Sec 2, [6.13.3] & Tab 1 |
| MANOVR | Clarification of survey requirements | Ch 5, Sec 11 |

Chapter 1 – Principles of Classification and Class Notations

Other Changes

| Topic | Description | Reference |
|--------------------------|-------------------------------------------------------------------------------|----------------|
| Classification Notations | Clarification of main class symbols, their assignment and related terminology | Sec 2, [2.1.3] |

Chapter 2 – Assignment, Maintenance, Suspension and Withdrawal of Class

Other Changes

| Topic | Description | Reference |
|----------------------|----------------------------------------------------|-------------------------------------|
| Documentation | Introduction of 3D class review | Sec 1, [2.3.12] |
| Maintenance of Class | Clarification of bottom survey requirements | Sec 2, [3.1.7] & [6.5.3] & [6.5.5] |
| Maintenance of Class | Clarification of class renewal survey requirements | Sec 2, [5.1.2] |
| Maintenance of Class | Clarification of intermediate survey requirements | Sec 2, [5.1.4] & [6.3.2] to [6.3.4] |

Chapter 3 – Scope of Surveys (All Ships)

Other Changes

| Topic | Description | Reference |
|------------------|------------------------------------------------------------------------------|------------------------------------|
| Tailshaft Survey | Addition of modified survey requirements for sea water lubricated tailshafts | Sec 5, [1.2.2] & [1.3.2] & [1.3.3] |

PART B – Hull and Stability

Chapter 2 – General Arrangement Design

Other Changes

| Topic | Description | Reference |
|-------------------------|-----------------------------------------------------------------------------------------------------------|----------------|
| Compartment arrangement | Clarification of the requirement for cofferdams between TR5 tanks and tanks for other liquid hydrocarbons | Sec 2, [2.2.3] |

Chapter 4 – Structure Design Principles

Other Changes

| Topic | Description | Reference |
|------------------|--------------------------------------------------------------|------------|
| Bottom Structure | Updated requirements for single web and box type bilge keels | Sec 4, [6] |

Chapter 8 – Other Structures

Other Changes

| Topic | Description | Reference |
|----------------------------|------------------------------------------------------------|----------------|
| Fore Part | Clarification of the scope of application of requirements | Sec 1, [1.1.1] |
| Bow Doors and Inner Doors | Clarification of Operating and Maintenance Manual contents | Sec 5, [8.1.1] |
| Side Doors and Stern Doors | Clarification of Operating and Maintenance Manual contents | Sec 6, [7.1.1] |

Chapter 11 – Construction and Testing

Other Changes

| Topic | Description | Reference |
|------------------------------|--------------------------------------------------------------|-------------------------------|
| Welding and Weld Connections | Updated requirements for single web and box type bilge keels | Sec 1, [3.2] & Tab 5 & Fig 11 |

PART C – Machinery, Systems and Fire Protection

Chapter 1 – Machinery

IACS Unified Requirements, Unified Interpretations & Recommendations

| IACS UR/UI | IACS Revision | IACS Title | Reference |
|------------|---------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| UR M61 | 1 | Starting arrangements of internal combustion engines | Sec 2, [3.1.1] a) |
| UR M60 | 1 | Control and safety of gas turbines for marine propulsion use | Sec 5, [2.6] |
| UR M56 | 4 Corr.2 | Marine gears – load capacity of involute parallel axis spur and helical gears | Sec 6, [2.1.1] & [2.5.7] & [2.6.8] & [4.2.1] a) & Tab 1 & Tab 2 & Tab 3 |
| UR P2.7.4 | 10 | Rules for piping design, construction and testing - P2.7.4 Mechanical joints | Sec 10, [2.4.5] k) |
| UR M42 | 6 | Steering gear | Sec 12 |
| UR E25 | 2 | Failure detection and response of all types of steering gear control systems | Sec 12, [2.8.5] |
| UR P4 | 7 | Production and application of plastic piping systems on ships | App 2 |

Other Changes

| Topic | Description | Reference |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Bending of pipes | The maximum allowable depth of corrugations during pipe bending process is set to 5% in line with common industry practice for class I and class II piping systems | Sec 10, [4.2.3] b) |

Chapter 2 – Electrical Installations

Other Changes

| Topic | Description | Reference |
|--------------------------|---------------------------------------------------------------------------------------------------|----------------|
| General | Cooling system of environmentally controlled spaces added to list of secondary essential services | Sec 1, [3.4.1] |
| Semiconductor converters | General update of the requirements for semiconductor converters, including requirements for UPS | Sec 6 |

IACS Unified Requirements, Unified Interpretations & Recommendations

| IACS UR/UI | IACS Revision | IACS Title | Reference |
|------------|---------------|----------------------------------------------------------------------------------------------|-------------|
| UR E19 | 1 | Ambient temperatures for electrical equipment installed in environmentally controlled spaces | Sec 12, [1] |

Chapter 4 – Fire Protection, Detection and Extinction

IACS Unified Requirements, Unified Interpretations & Recommendations

| IACS UR/UI | IACS Revision | IACS Title | Reference |
|------------|---------------|--------------------------------|----------------|
| UI SC167 | 1 Corr. 1 | Electrical distribution boards | Sec 5, [1.2.3] |

Other Changes

| Topic | Description | Reference |
|------------------------|-------------------------------------------------------------------------------------------|-------------------|
| Escape and circulation | Clarification of requirements for coamings of access hatches in internal watertight decks | Sec 8, [4.1.1] g) |

PART D – Service Notations

Chapter 4 – Auxiliary Naval Vessel

Other Changes

| Topic | Description | Reference |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Fire Safety - Ventilation systems | Clarification that alternative configurations of the ventilation systems may be acceptable for specific naval operational situations | Sec 6, [4.2] |

Chapter 6 – Military Offshore Patrol Vessel

Other Changes

| Topic | Description | Reference |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Fire Safety - Ventilation systems | Clarification that alternative configurations of the ventilation systems may be acceptable for specific naval operational situations | Sec 5, [2.2.3] |

Chapter 7 – Landing Crafts

Other Changes

| Topic | Description | Reference |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Fire Safety - Ventilation systems | Clarification that alternative configurations of the ventilation systems may be acceptable for specific naval operational situations | Sec 4, [2.2.2] |

PART E – Additional Class Notations

New additional class notations

| Notation | Description | Reference |
|-------------|---------------------------------------------------------------------------------------------------------------------------|-----------|
| CBRN | New additional class notations covering CBRN protection for naval ships: CBRN and CBRN-AIR BLAST RESISTANCE | Ch 8 |

Chapter 5 – Monitoring Equipment (MON)

Other Changes

| Notation | Description | Reference |
|------------------|------------------------------------------------------------------------------|-----------|
| MON-SHAFT | Update of MON-SHAFT notation with sea water lubrication of tailshafts | Sec 2 |

Chapter 7 – Environmental Protection

IMO Requirements

| IMO Ref. | IMO Rev. | IMO Title | Reference |
|----------------|------------|-----------------------------------------------------------------------------------|--------------|
| AFS Convention | 17/06/2021 | AFS Convention - Prohibition of cybutryne (included in CLEANSHIP notation) | Sec 2, [2.5] |

Chapter 10 – Safety Equipment and Installations

Other Changes

| Notation | Description | Reference |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| FIRE | Re-organization of the additional class notation FIRE in order to include multilayer fire testing (low flame-spread characteristics) and remote-release requirements for doors required to remain open for smoke evacuation purposes | Sec 3 |