

# RULES

## FOR THE CLASSIFICATION, CONSTRUCTION AND EQUIPMENT OF MOBILE OFFSHORE DRILLING UNITS AND FIXED OFFSHORE PLATFORMS

### PART XIX NAVIGATIONAL EQUIPMENT

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# **RULES FOR THE CLASSIFICATION, CONSTRUCTION AND EQUIPMENT OF MOBILE OFFSHORE DRILLING UNITS AND FIXED OFFSHORE PLATFORMS**

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Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units (MODU) and Fixed Offshore Platforms of (FOP) of Russian Maritime Register of Shipping (RS, the Register) have been approved in accordance with the established approval procedure and come into force on 1 July 2022.

The present edition of the Rules is based on the 2018 edition taking into account the amendments and additions developed before publication.

The Rules set down specific requirements for MODU and FOP, consider the recommendations of the Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code), as adopted by the IMO Assembly on 2 December 2009 (IMO resolution A.1023(26)).

The procedural requirements, unified requirements, unified interpretations and recommendations of the International Association of Classification Societies (IACS) and the relevant resolutions of the International Maritime Organization (IMO) have been taken into consideration.

The Rules are published in the following parts:

Part I "Classification";

Part II "Hull";

Part III "Equipment, Arrangements and Outfit of MODU/FOP";

Part IV "Stability";

Part V "Subdivision";

Part VI "Fire Protection";

Part VII "Machinery Installations and Machinery";

Part VIII "Systems and Piping";

Part IX "Boilers, Heat Exchangers and Pressure Vessels";

Part X "Electrical Equipment";

Part XI "Refrigerating Plants";

Part XII "Materials";

Part XIII "Welding";

Part XIV "Automation";

Part XV "MODU and FOP Safety Assessment";

Part XVI "Signal Means";

Part XVII "Life-Saving Appliances";

Part XVIII "Radio Equipment";

Part XIX "Navigational Equipment";

Part XX "Equipment for Prevention of Pollution".

These Rules supplement the Rules for the Classification and Construction of Sea-Going Ships and the Rules for the Equipment of Sea-Going Ships.

**REVISION HISTORY**

(purely editorial amendments are not included in the Revision History)

For this version, there are no amendments to be included in the Revision History.

## **1 GENERAL**

### **1.1 APPLICATION**

**1.1.1** The requirements of the present Part apply to navigational equipment which is subject to survey by the Register and intended for installation on board MODU/FOP.

## **1.2 DEFINITIONS AND EXPLANATIONS**

**1.2.1** The definitions and explanations relating to general terminology are given in the General Regulations for the Classification and Other Activity and in Part I "Classification" of the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units (MODU) and Fixed Offshore Platforms (FOP)<sup>1</sup>.

**1.2.2** The definitions and explanations relating to navigational equipment are given in Part V "Navigational Equipment" of the Rules for the Equipment of Sea-Going Ships.

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<sup>1</sup> Hereinafter referred to as "the MODU/FOP Rules".

## **2 LIST OF MODU/FOP NAVIGATIONAL EQUIPMENT**

### **2.1 GENERAL**

**2.1.1** The MODU/FOP navigational equipment shall be installed in such a number and to have such technical performance as to ensure:

- .1** determination of its own position and observation of surrounding conditions;
- .2** the independent navigational support of a self- propelled MODU in sea transit while following to a drilling location and coming back to the port of registry.

## 2.2 LIST OF MODU/FOP NAVIGATIONAL EQUIPMENT

**2.2.1** Each self-propelled MODU, depending on its gross tonnage shall be fitted with navigational equipment in accordance with the requirements of Section 2, Part V "Navigational Equipment" of the Rules for the Equipment of Sea-Going Ships. The non-self-propelled MODU/FOP shall be fitted with navigational equipment in accordance with [Table 2.2.1](#).

MODU/FOP constructed after 1 July 1994 and fitted with the 2nd and 3rd class dynamic positioning systems (refer to 7.5, Part XIV "Automation") shall have means for the receipt of information from at least three positioning systems based on different principles. The drilling units provided with the 2nd class dynamic positioning systems shall be fitted with three gyrocompasses.

Table 2.2.1

Nos.	Item	Quantity
1	Automatic identification system (AIS) equipment	1
2	Radionavigation system/systems receiver	1
3	Radar	1
4	Ship's hydrometeorological complex <sup>1</sup>	1
5	Aneroid barometer	1
6	Prismatic binocular	2
7	Inclinometer	2
8	Stopwatch	1

<sup>1</sup> Ship's hydrometeorological complex shall provide continuous monitoring of the following parameters:

.1 atmospheric pressure within the range from 0,9 to 1,1 bar (675 — 825 millimeter of mercury) with an error limit of  $\pm 0,5$  millimeter of mercury;

.2 air temperature within the range from  $-40$  °C to  $+60$  °C with an error limit of  $\pm 0,5$  °C;

.3 relative air humidity with an error limit of  $\pm 2$  per cent (measurement shall made at an ambient air temperature from  $-20$  °C to  $+50$  °C);

.4 apparent and true wind directions within the range of course angles from 0 to 360° with an error limit of  $\pm 5$ ° (with the apparent wind velocity of 5 m/s and more);

.5 apparent and true wind velocity within the range from 1 m/s to 50 m/s with an error limit of  $\pm 2$  per cent of the current wind velocity;

.6 velocity and direction of currents:

velocity range: from 0 to 500 cm/s;

horizontal accuracy  $\pm 1$  cm/s;

vertical accuracy  $\pm 2,0$  cm/s;

direction range: from 0 to 360°;

accuracy:  $\pm 4$ °;

.7 water temperature:

range of water temperature measurements depending on the area of navigation:

from  $-3$  °C to  $+37$  °C;

accuracy:  $\pm 0,1$  °C;

.8 sea state recorded parameters: (maximum wave height, average period, wave steepness).

If the MODU/FOP is fitted with a helideck the following sensors shall be added to the weather station:

sensor of meteorological visibility range providing the visibility range measurements within the range from 50 to 1600 m and with an accuracy not more than 20 per cent of the measured value;

sensor of the cloud base providing measurement of the height to the cloud base within the range from 10 to 8000 m, with a resolution up to 10 m and accuracy  $\pm 20$  m.

**2.2.2** The self-propelled MODU engaged on international voyages shall be equipped with the system of long-range identification and tracking of ships (LRIT).

The self-propelled MODU engaged on international voyages, constructed before 31 December 2008 and intended for navigation in sea areas **A1** and **A2** or in sea areas **A1**, **A2** and **A3** shall be equipped with LRIT system not later than the first survey of the radio installation after 31 December 2008.

The self-propelled MODU engaged on international voyages, constructed before 31 December 2008 and intended for navigation in sea areas **A1**, **A2**, **A3** and **A4** shall be equipped with LRIT system not later than the first survey of the radio installation after 1 July 2009. However, whilst these self-propelled MODU operate within sea areas **A1**, **A2** and **A3** they shall be equipped with LRIT system not later than the first survey of the radio installation after 31 December 2008.

LRIT system is not obligatory for MODU, irrespective of the date of construction, fitted with an automatic identification system (AIS) and intended to operate exclusively within sea area **A1**.



### **3 NAVIGATIONAL EQUIPMENT ARRANGEMENT**

**3.1** All the navigational devices listed in [Table 2.2.1](#) shall be installed in the control station.

The navigational equipment fed by electric power shall not be installed in hazardous spaces and areas unless it is of the appropriate intrinsically safe type.

Russian Maritime Register of Shipping

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Part XIX  
Navigational Equipment**

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