

RULES

FOR THE CLASSIFICATION AND CONSTRUCTION OF FLOATING OFFSHORE OIL-AND-GAS PRODUCTION UNITS

PART XV AUTOMATION

ND No. 2-020201-020-E



**St. Petersburg
2022**

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF FLOATING OFFSHORE OIL-AND-GAS PRODUCTION UNITS

Rules for the Classification and Construction of Floating Offshore Oil-and-Gas Production Units (FPU) of Russian Maritime Register of Shipping (RS, the Register) have been approved in accordance with the established approval procedure. The date of coming into force of the present Rules is 1 January 2022.

The present Rules set forth specific requirements for FPU, consider the recommendations of the IMO Code for the Construction and Equipment of MODU, as adopted by the IMO Assembly on 19 October 1989 (IMO resolution A.649(16)), take account of international practice of FPU construction and operation, requirements of the rules of the IACS members, international standards, as well as experience of Russian Maritime Register of Shipping relating to the classification and construction of ships, mobile offshore drilling units and fixed offshore platforms, stated in the relevant rules.

The Rules are published in the following parts:

Part I "Classification";

Part II "Hull";

Part III "Equipment, Arrangements and Outfit";

Part IV "Stability";

Part V "Subdivision";

Part VI "Fire and Explosion Protection";

Part VII "Machinery Installations";

Part VIII "Systems and Piping";

Part IX "Machinery";

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

Part XI "Electrical Equipment";

Part XII "Refrigerating Plants";

Part XIII "Materials";

Part XIV "Welding";

Part XV "Automation";

Part XVI "General Requirements and Safety Principles".

The present Rules supplement the Rules for the Classification and Construction of Sea-Going Ships, Rules for the Equipment of Sea-Going Ships and Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms.

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 Requirements of [Sections 1 — 5, 8](#) and [9](#) apply to the automation equipment liable to technical supervision without regard to the automation mark in the class notation of FPU.

1.1.2 Requirements of [Sections 6](#) and [7](#) additionally apply to the equipment of FPU, which class notation is added with one of the automation marks and/or one of the dynamic positioning system marks in accordance with Part I "Classification".

1.1.3 Requirements of [Section 6](#) also apply to FPU without the automation mark in the class notation but those equipped with the central control station and remote control systems for the machinery and arrangements.

1.1.4 The present part of the Rules contains technical requirements for the automation equipment and FPU where it is installed as well as it contains the minimum scope of the remote, automated and automatic control, protection, alarm and indication systems.

1.2 DEFINITIONS AND EXPLANATIONS

1.2.1 Definitions and explanations are given in the General Regulations for the Classification and Other Activity, Part I "Classification" and Part XV "Automation" of the Rules for the Classification and Construction of Sea-Going Ships¹, Part I "Classification" and XIV "Automation" of the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms², as well as in Part I "Classification", Part III "Equipment, Arrangements and Outfit" and Part VI "Fire and Explosion Protection" of the Rules for the Classification and Construction of Floating Offshore Oil-and-Gas Production Units³.

1.2.2 Thruster assisted position mooring system is a position mooring system where an auxiliary dynamic positioning system is used to supplement a position mooring system.

¹ Hereinafter referred to as "the Rules for the Classification".

² Hereinafter referred to as "the MODU/FOP Rules".

³ Hereinafter referred to as "the FPU Rules".

1.3 SCOPE OF TECHNICAL SUPERVISION

1.3.1 Automation components, control devices and systems listed in 1.3.2, Part XIV "Automation" of the MODU/FOP Rules in the applicable scope are liable to the technical supervision of the design and manufacture of equipment and its details.

1.4 TECHNICAL DOCUMENTATION

1.4.1 Technical documentation in accordance with the requirements of 1.4, Part XV "Automation" of the Rules for the Classification and 1.4, Part XIV "Automation" of the MODU/FOP Rules shall be submitted to the Register in respect of the automation equipment listed in [1.3.1](#).

2 DESIGN OF AUTOMATION SYSTEMS, AUTOMATION COMPONENTS AND CONTROL DEVICES

2.1 GENERAL

2.1.1 Automation systems shall comply with the requirements of 2.1, Part XIV "Automation" of the MODU/FOP Rules.

2.1.2 Automation components, devices and systems fitted on open decks shall operate without fails at a design external temperature appropriate to the FPU area of operation.

**2.2 REQUIREMENTS FOR COMPONENTS, DEVICES AND SYSTEMS OF THE
AUTOMATED CONTROL, ALARM, PROTECTION, INDICATION AND LOGGING**

2.2.1 Components, devices and systems of the automated control, alarm, protection, indication and logging shall comply with the requirements of 2.2 – 2.4, Part XIV "Automation" of the MODU/FOP Rules correspondingly.

3 POWER SUPPLY OF AUTOMATION SYSTEMS

3.1 Power supply of the automation system shall comply with the requirements of Section 3, Part XIV "Automation" of the MODU/FOP Rules.

4 AUTOMATED MACHINERY AND INSTALLATIONS

4.1 Automated machinery and installations shall comply with the requirements of Section 4, Part XIV "Automation" of the MODU/FOP Rules.

5 COMPUTERS AND COMPUTER-BASED AUTOMATION SYSTEMS

5.1 Computers and computer-based automation systems shall comply with the requirements of Section 5, Part XIV "Automation" of the MODU/FOP Rules.

6 OBJECTS WITH THE AUT MARK IN THE CLASS NOTATION

6.1 Objects with the **AUT** mark in the class notation shall comply with the requirements of Section 6, Part XIV "Automation" of the MODU/FOP Rules.

7 DYNAMIC POSITIONING SYSTEMS

7.1 Dynamic positioning systems shall comply with the requirements of Section 7, Part XIV "Automation" of the MODU/FOP Rules.

8 POSITION MOORING SYSTEM

8.1 Position mooring system shall comply with the requirements of 8.1 and 8.2, Part XIV "Automation" of the MODU/FOP Rules.

9 THRUSTER ASSISTED POSITION MOORING SYSTEM

9.1 Applicable requirements of 7.7, 7.8, 7.12 and 8.2, Part XIV "Automation" of the MODU/FOP Rules apply to the control systems of the thruster assisted position mooring system.

Russian Maritime Register of Shipping

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Part XV
Automation**

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