

# RULES

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

ND No. 2-020201-024-E

### RULE CHANGE NOTICE

ENTERS INTO FORCE:

01.07.2024



St. Petersburg  
2024

# **RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF FLOATING OFFSHORE OIL-AND-GAS PRODUCT UNITS**

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The present Rule Change Notice to the Rules for the Classification and Construction of Floating Offshore Oil-and-Gas Product Units (FPU) (hereinafter — RCN) has been approved in accordance with the established approval procedure and contains information on amendments and additions, except for editorial amendments. RCN amendments come into force on 1 July 2024.

## REVISION HISTORY

### PART VI. FIRE AND EXPLOSION PROTECTION

Item	Applicability	Description	Remarks
<a href="#">Para 2.3.2</a>	Floating offshore oil-and-gas product units (FPU) Load-bearing structures Fire test of load-bearing structures	Standards have been specified for fire tests of the FPU load bearing structures at cellulosic fire (CF), hydrocarbon pool fire (PF) and hydrocarbon jet fire (JF)	Standards BS 476, ISO 834-1, GOST R 53295-2009 and ISO 22899-1

## PART VI. FIRE AND EXPLOSION PROTECTION

### 2 STRUCTURAL FIRE PROTECTION

#### 2.3 REQUIREMENTS FOR FIRE INTEGRITY

Para 2.3.2 is amended as follows:

"2.3.2 Table 2.3.2 contains provisions on standard application of structural fire protection on FPU.

Table 2.3.2

Fire area	Accommodation spaces/Temporary refuge (AS/TR)	Non-hazardous service areas (SA)	Wellhead areas (WH)	Process areas (PA) including gas compression areas	Control stations (CS)
AS/TR	1/CF/400	1/CF/400	N/A	N/A	1/CF/400
SA	1/CF/400	1/CF/400	1/CF/400	1/CF/400	1/CF/400
WH	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400
PA	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400	1/JF <sup>1</sup> /400
CS	1/CF/400	1/CF/400	N/A	N/A	1/CF/400

<sup>1</sup> "PF" type of fire may be considered as appropriate if the evaluation of fires in the area proves that "JF" is not a credible basis for the calculation of structural fire protection.  
 Notes: 1. Rating is specified as: period of resistance (hours)/type of fire/critical temperature (°C).  
 2. Type of fire: PF — pool fire, CF — cellulosic fire, JF — jet fire.

Temperature 400 °C stated in Table 2.3.2 is the critical temperature for load-bearing steel structures. The corresponding value for load-bearing aluminium structures is 200 °C.

The values given in Table 2.3.2 shall be read as follows:

where load-bearing structures for accommodation spaces are connected with structures in a process area, then the load-bearing structures shall be protected against jet fire for 1 h at the ultimate temperature of the steel structure equal to 400 °C;

Fire test of load-bearing structures at CF and PF shall be conducted in compliance with the requirements of Parts 20 "Method for determination of the fire resistance of elements of construction (general principles)" and 21 "Methods for determination of the fire resistance of loadbearing elements of construction", BS 476 "Fire tests on building materials and structures".

Fire tests of load-bearing structures may be conducted in compliance with the requirements of ISO 834-1 "Fire-resistance tests — Elements of building construction — Part 1: General requirements" or GOST R 53295-2009 "Fire retardant compositions for steel constructions. General requirement. Method for determining fire retardant efficiency" (for FPU flying the flag of the Russian Federation); thus, the critical temperature shall be taken from Table 2.3.2. Application of the similar standards for fire tests of load-bearing structures shall be agreed with the Register.

Fire test of load-bearing structures at JF shall be conducted in compliance with the requirements of ISO 22899-1 "Determination of the resistance to jet fires of passive fire protection materials — Part 1: General requirements".

Where several different fires are possible in the area, the type of fire, for which the strictest requirements for structural fire protection are established, shall be selected.

The load-bearing structures required to be "H/J" combined fire integrity class rated (refer to 2.1.5), shall be tested both in compliance with the requirements of BS-476 or ISO 834-1 (or GOST R 53295-2009), and in compliance with the requirements of ISO 22899-1 when these structures are located within 15 m of potential sources of JF."

Russian Maritime Register of Shipping

**Rule Change Notice to the Rules for the Classification and Construction  
of Floating Offshore Oil-and-Gas Product Units**

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