RULES

FOR THE CLASSIFICATION AND CONSTRUCTION OF FIXED OFFSHORE PLATFORMS

ND No. 2-020201-027-E

RULE CHANGE NOTICE

ENTERS INTO FORCE:

01.07.2024



St. Petersburg 2024

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF FIXED OFFSHORE PLATFORMS

The present Rule Change Notice to the Rules for the Classification and Construction of Fixed Offshore Platforms (the FOP Rules) 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.

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REVISION HISTORY

PART II. HULL

Item	Applicability	Description	Remarks
Para 1.5.1	Fixed offshore platforms	Instructions on selection of steel grade for	
	Hull structures	hull structures have been introduced	

PART VI. FIRE PROTECTION

Item	Applicability	Description	Remarks
Para 2.6.1	Fixed offshore platforms (FOP) Load-bearing structures Fire test of load-bearing structures	Standards have been specified for fire tests of the FOP 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 XIII. WELDING

Item	Applicability	Description	Remarks
Para 2.7.5	Fixed Offshore Platforms Metal structures Underwater welding Welding of structures having their back side in contact with water	Text of para has been replaced by the reference to new Chapter 2.14, Part XIV "Welding" of the Rules for the Classification and Construction of Sea-Going Ships containing the requirements for underwater welding and welding of structures having their back side in contact with water	

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PART II. HULL

1 GENERAL

1.5 MATERIALS

Para 1.5.1 is amended as follows:

"1.5.1 Steel structures.

The rRequirements for materials of steel structures selection of steel grade for hull structures are given in 1.5 of Part XII "Materials" of the FOP Rules 1.5.1 of Part II "Hull" of the MODU Rules.".

PART VI. FIRE PROTECTION

2 STRUCTURAL FIRE PROTECTION

2.3 ADDITIONAL REQUIREMENTS FOR FIRE INTEGRITY

Para 2.6.1 is amended as follows:

"2.6.1 Fire integrity of the FOP load-bearing structures shall meet the requirements of Table 2.6.1.

Table 2.6.1

Fire area	Accommodation block/ 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 ¹ /400	1/JF ¹ /400	1/JF ¹ /400	1/JF ¹ /400	1/JF ¹ /400
PA	1/JF ¹ /400	1/JF ¹ /400	1/JF ¹ /400	1/JF ¹ /400	1/JF ¹ /400
CS	1/CF/400	1/CF/400	N/A	N/A	1/CF/400

¹ "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.

Temperature 400 °C stated in Table 2.6.1 is the critical temperature for load-bearing steel structures. The corresponding value for load-bearing aluminium structures is 200 °C. For other materials the critical temperature is the temperature, at which the yield strength is reduced to the minimum allowable strength level for operational loading cases.

The values given in Table 2.6.1 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 $^{\circ}$ C;

<u>Fire test of load-bearing structures at CF and PF shall be conducted in compliance with</u> the requirements of Parts 20 "Method for determination of the fire resistance of elements of

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.

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 FOP flying the flag of the Russian Federation); thus, the critical temperature shall be taken from Table 2.6.1. 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".

<u>wW</u>here 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, unless this case is proven to be unrealistic for use as a design basis.

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 (refer to 2.2.2.1 and 2.2.3.1)."

PART XIII. WELDING

2 PROCESS REQUIREMENTS FOR MANUFACTURE OF FOP WELDED STRUCTURES 2.7 WELDING OF HULLS AND EQUIPMENT OF FOP

Para 2.7.5 is replaced by the following text:

"2.7.5 Underwater welding and welding of structures having their back side in contact with water.

Underwater welding and welding of structures having their back side in contact with water are performed in compliance with the requirements of 2.14, Part XIV "Welding" of the RS Rules/C.".

Russian Maritime Register of Shipping

Rule Change Notice to the Rules for the Classification and Construction of Fixed Offshore Platforms

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FAI "Russian Maritime Register of Shipping" 8, Dvortsovaya Naberezhnaya, 191186, St. Petersburg, Russian Federation www.rs-class.org/en/