

Circular - Series R

Circular Series R (Regulations) supersedes previous Series F. In the new Series R, relevant legal amendments and amendments to conventions are also published.

Circular recipients: (check box)

- Sdir: Norwegian Maritime Authority
- A: 16 specially authorised employment offices
- U: Selected foreign service missions
- P: Equipment manufacturers, any subgroups
- OFF: Offshore companies/OIM/operators
- Hov: Main organisations
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- Others:

No.: RSR 17-2017

Date: 21 December 2017

Journal No.: 2015/31765 NHA

Supersedes: Regulations 4 July 2007 No. 854 on deck cranes etc. on mobile offshore units (the Crane Regulations)

Reference to: New Regulations on cranes and lifting operations on mobile offshore units

The Circular should be entered into a special diagram or as appropriate in the latest editions of relevant NMA publications and kept until the next editions.

New Regulations on cranes and lifting operations on mobile offshore units

Introduction

The Norwegian Maritime Authority (NMA) has laid down new Regulations on cranes and lifting operations on mobile offshore units¹ that enter into force on 1 January 2018. As from the same date, the Regulations of 4 July 2007 No. 854 on deck cranes, etc. on mobile offshore units (Crane Regulations) are repealed².

The proposal was circulated for review from 29 June to 4 October 2017. The NMA received 18 consultative statements, and 16 included comments to the draft.

Information about the new Regulations

In the new Crane Regulations, the NMA has merged all the requirements for cranes and lifting operations in one set of regulations, making the legislation clearer and easier to use. The new Crane Regulations partly continue the current law as they did in the current Crane Regulations. They also include substantive changes and linguistic improvements.

In the new Crane Regulations, references to standards for the construction of cranes and loose lifting equipment will be used to a greater extent, instead of incorporating requirements in the text of the Regulations. Unessential special requirements have also been removed.

The arrangement of competent persons type A-1 will be discontinued within a transitional period of two years. It will be replaced by a competent company type A-1.

Comparison of the Regulations

The new Crane Regulations	The current Crane Regulations	New requirement	Comments
Section 1 Scope of application	Section 2		
Section 2 Definitions	Section 3		Fewer definitions than the current Crane Regulations

¹ In the Circular referred to as the new Crane Regulations.

² In the Circular referred to as the current Crane Regulations.

			Change in terminology (offshore cranes and deck
Section 3 Competent company type A-1 and competent person type B-1	Section 8		Competent person type A-1 is replaced by competent company type A-1.
Section 4 The validity of approvals as competent company type A-1 and competent person type B-1		All requirements are new	
Section 5 Documentation	section 15 ninth paragraph	Second to fifth paragraph	
Section 6 Crane manual	Section 7 second paragraph		
Section 7 Certificates for cranes and loose lifting equipment	Section 15 third, seventh and ninth paragraph		
Section 8 Construction of cranes	Section 7 Section 10 Section 11 Section 12	Second paragraph	Class legislation may be used as an alternative.
Section 9 Loose lifting equipment	Section 12	Reference to standard	
Section 10 Fibre rope		The entire provision is new	
Section 11 Lifts			The requirement has been moved from the Regulations on the construction of ships Section 23

Section 12 Lift trucks and other mobile lifting appliances			Some requirements are moved from the Regulations on protective, environmental and safety measures on mobile offshore units ³ section 10, while others are not continued. Reference to the Regulations on construction ⁴ section 14 No. 2.10.
Section 13 Certificate of competence for operators of cranes, lift trucks and other mobile lifting appliances		The entire provision is new.	
Section 14 Crane foundation	Section 13 third paragraph		
Section 15 Scope of initial examination of cranes	Section 15 first paragraph (a) and (c)	The test load shall comply with the standard pursuant to which the crane is constructed.	
Section 16 Execution of initial examination of cranes	Section 15 first paragraph (b) and second and eighth paragraph	First paragraph (b) and second paragraph (b) Third and fifth paragraph	

³ Regulations of 4 September 1987 No. 859 on protective, environmental and safety measures on mobile offshore units.

⁴ Regulations of 4 September 1987 No. 856 on the construction of mobile offshore units.

Section 17 Scope of annual examination of cranes	Section 15 eighth paragraph	(a)	
Section 18 Scope of five-yearly examination of cranes	Section 15 first and second paragraph.	(a)	
Section 19 Execution of annual and five-yearly examination of cranes	Section 15 tenth paragraph	First paragraph (b) and second paragraph (b)	
Section 20 Examination after overload of or damage to cranes	section 15 fourth paragraph	First and third paragraphs	
Section 21 Examination and certification of loose lifting equipment	Section 15 fifth paragraph	First paragraph	The table of section 15 fifth paragraph is continued in the second paragraph.
Section 22 Pad eyes		The entire provision is new.	
Section 23 Material handling	Section 17 second paragraph	New requirements	
Section 24 Use of wire rope and loose lifting equipment		New requirements	
Section 25 Use of cranes and other lifting appliances	Section 18	First paragraph	
Section 26 Exemptions	Section 19		
Section 27 Transitional provisions	Section 2 second paragraph		
Section 28 Entry into force	Section 20		

Comments to the individual provisions

To section 1 Scope of application

The specification of cranes and other lifting appliances and lifting operations in the drilling and processing areas not being included in the Regulations, is not continued. This means an expansion of the scope of application compared to the current Crane Regulations. However, in our

assessment, this will have no practical meaning because as far as we know, DNV GL standards, or standards with equivalent safety levels for lifting appliances in the drilling and processing areas, are being used.

We have previously been asked if davits used for evacuation and life-saving appliances are subject to the current Crane Regulations. Based on these facts, we have seen a need to specify the delimitation of the scope of application of the new Crane Regulations.

To section 2 Definitions

In the current Crane Regulations, the term offshore cranes was referred to as deck cranes. In the new Crane Regulations, the term deck crane is used about a crane that is only used for internal lifting operations. This and other terms used are in line with the terms used by the industry. The definition of a recognised classification society and MOU classification society of the current Crane Regulations section 3 (a) and (f) has been continued in (c) and (d).

To section 3 Competent company type A-1 and competent person type B-1

Section 8 of the current Crane Regulations is continued in section 3 with the exemptions from the requirements for competent person type A-1.

Cranes that are used on mobile offshore units today are usually very advanced. It is unlikely that one person will be able to master all areas of crane expertise, including hydraulics, strength and structure, automation and electronics, in a satisfactory way for the mandatory crane examination. An arrangement of approval is therefore introduced for competent company type A-1 instead of competent person type A-1. This means that the NMA will start to approve companies, and not individuals, which is the case with the current arrangement.

By changing from competent person type A-1 to competent company type A-1, persons that are not connected to a company after the transitional provision date, will not be able to carry out an examination according to the Regulations.

Approved competent persons type A-1 may be approved as B-1 by application. This way, they will still be able to carry out annual and five-yearly examination of cranes.

The NMA will not approve anyone as competent person type A-1 after the Regulations have entered into force.

Due to consultative comments, we have specified in the first paragraph (a) that the competence must relate to cranes. The requirements state the details. During the approval process, the NMA will consider the company's safety management system and overall competence.

The requirement of the second paragraph continues section 8 second paragraph (b) of the current Crane Regulations with some linguistic changes.

Companies seeking approval as competent company type A-1 must submit an application, cf. the third paragraph. This also applies to persons seeking approval as competent person type B-1.

The practical test, which is required by the fourth paragraph, must be observed by one of our surveyors, and a final approval as competent person will be given when the test has been approved. The requirement is based on the NMA's administrative practice. The person taking the practical test must provide a suitable crane for the test.

To section 4 The validity of approvals as competent company type A-1 and competent person type B-1

These requirements will give the NMA a better overview of which competent persons and companies that are active at any given time. The NMA would also like to be able to regularly check if the competent persons and companies are up to date on the legislation. The competent persons and companies must therefore make sure that the NMA always has their correct contact information. Competent persons or companies who don't comply with this requirement may be excluded from the list of persons or companies with a valid approval.

Only one linguistic change has been made in the first paragraph compared to the draft Regulations.

To section 5 Documentation

The first paragraph continues section 15 ninth paragraph of the current Crane Regulations with linguistic changes.

The second to fifth paragraphs are based on the content of RSV 6-2013. However, certain adaptations and simplifications have been made compared to the guidance circular. The service log and certificates can be filed either in an electronic system or in a paper-based system. A split system is not adequate, so one of the alternatives must be selected for all types of documentation.

To section 6 Crane manual

The section continues section 7 second paragraph of the current Crane Regulations with linguistic changes. It also applies to deck cranes.

The NMA has not put the requirements from section 7 second paragraph of the current Crane Regulations regarding maintenance in a separate manual, as these are already a part of the maintenance system on board the unit.

To section 7 Certificates for cranes and loose lifting equipment

The section continues section 15 third, seventh and ninth paragraphs of the current Crane Regulations, with some linguistic changes.

To section 8 Construction of cranes

Section 7 first paragraph of the current Crane Regulations continues in the first paragraph (a) with an updated reference to EN 13852-1:2013.

First paragraph (b) refers to DNVGL-ST-0378. A standard with the corresponding level of safety from another MOU classification society may be used as an alternative to the standard in (a). The requirement gives a greater flexibility for the examination regime, since the rules of a MOU classification society may also be used. This means that the class society's examination regime may be used as an alternative to competent persons/companies approved by the NMA. Following consultative statements regarding the draft Regulations, we have clarified that we refer to the DNGVL standard from May 2016.

The requirement in the second paragraph is new and will contribute to improved safety for personnel lifting operations. An emergency operation function must be available within one minute compared to the equivalent requirement of EN 13852-1:2004 which states 30 minutes. Following consultative statements, we have only included the requirement of having an emergency operation function available within one minute instead of referring to the NORSOK standard chapter 5.15.3.

The third paragraph sets out an exemption for offshore cranes for which a delivery contract was entered into before 1 January 2018, since this would have had disproportionately great consequences for the upgrade of existing cranes. Compared to the draft regulations, we have now included a documentation requirement that must be viewed in context of the Risk Analyses Regulations section 22 related to requirements for equipment concerning single operational

errors or failures that may cause serious incidents. We regard it appropriate to specify that the shipping company must document that safety of the personnel is incorporated for the offshore cranes that are exempt from the requirement in the first paragraph.

The requirement in the fourth paragraph is also a new requirement, but based on what we know, this is in accordance with the current construction process for deck cranes.

Section 10 ninth paragraph (a) and (c) of the current Crane Regulations continues in the fifth paragraph but with no reference to the Regulations on protective, environmental and safety measures on mobile offshore units.

To section 9 Loose lifting equipment

The section continues section 12 of the current Crane Regulations, but instead of having specific requirements in the actual Regulations, reference is made to NORSOK R-002 or a standard of the same scope and safety level.

To section 10 Fibre rope

The requirement of fibre rope is new. The crane is not always designed for fibre ropes. As a result, (b) sets out a requirement that the use of fibre rope must comply with the recommendations and specifications of the crane supplier. This is to make sure that fibre ropes are not installed in cranes unless the crane supplier has accepted this as an option.

To section 11 Lifts

The section continues section 23 of the Regulations on the construction of ships, with some linguistic changes.

In the consultation, the NMA suggested regulation of other mobile, electric, and hydraulic lifts than personnel and cargo lifts. We did, however, receive several comments saying that it was unclear which lifts we intended to regulate. As a result, we have not included any requirements at this stage. This will be reconsidered at a later stage.

To section 12 Lift trucks and other mobile lifting appliances

To a great extent this section continues section 10 of the Regulations on protective, environmental and safety measures on mobile offshore units, with some linguistic changes. Compared to the draft regulations, requirements of the size of *coamings or other equally efficient arrangements around openings flush with decks, ramps, etc.* has been included in section 14 No.

2.10 of the Regulations on the construction of ships with a reference to the new Crane Regulations.

To section 13 Certificate of competence for operators of cranes, lift trucks and other mobile lifting appliances

At the consultation we received several comments related to the suggested certificates of competence in section 13. As a result, we have made a few changes to the section. As for requirements for the G5 certificate of competence, this requirement only applies to operators of offshore cranes. An equivalent certificate of competence will also be adequate.

There has been a change of certificate of competence for operators of deck cranes from G5 to G20 or equivalent competence. Operators of lift trucks and other mobile lifting appliances shall have relevant certificate of competence.

To section 14 Crane foundation

The section continues section 13 third paragraph of the current Crane Regulations.

To section 15 Scope of initial examination of cranes

The first paragraph continues section 15 first paragraph (c) of the current Crane Regulations. Due to consultative comments, however, we have specified that all test weights shall be verified. Verification method has not been stated.

A change has been made to the second paragraph compared to the circulated proposal. The table has been removed, and it is stated that the test load will be conducted according to the standard by which the crane is constructed. The class calculation for test load must be used if the crane has been constructed by the class standard. If the crane has been constructed based on the standard EN-13852-1:2013, however, the test load calculation for this standard shall be used.

To section 16 Execution of initial examination of cranes

The first paragraph (a) and second paragraph partly continue section 15 second and eighth paragraph of the current Crane Regulations, with linguistic changes.

The first paragraph (b) and second paragraph (b) include new requirements that give a greater flexibility than the examination regime of the current Crane Regulations.

The third paragraph is also new. The NMA assesses that in order to avoid dependency between the parties, the crane manufacturer should not conduct the examination.

The fourth paragraph continues section 15 first paragraph (b) of the current Crane Regulations with some linguistic changes.

The requirement of the fifth paragraph is new. The company has a responsibility to make sure that the competent company or person to conduct the initial examination is listed in the NMA's overview of approved companies and persons.

To section 17 Scope of annual examination of cranes

The requirement of (a) is new. The guidelines of the crane supplier must be reviewed in order to make sure the examination is sufficiently thorough.

The requirement of (b) continues section 15 eighth paragraph (b) of the current Crane Regulations, with some linguistic changes.

To section 18 Scope of five-yearly examination of cranes

The guidelines of the crane supplier must be reviewed in order to make sure the examination is thorough enough cf. the first paragraph.

The material content of the second paragraph is taken from the Regulations on cargo-handling appliances in ships section 18 second paragraph first sentence. Following consultative statements regarding the draft regulations, the examiner is now authorised to assess the complete disassembly and dismantling of devices and equipment, even if this is not required pursuant to the guidelines from the crane supplier. Some linguistic changes have also been made.

To section 19 Execution of annual and five-yearly examination of cranes

The requirements of this section are new. The described procedure, however, is the same as in section 15 of the current Crane Regulations.

In the new Crane Regulations, (b) in the first paragraph and (b) in the second paragraph give a greater flexibility compared to the examination regime in the current Crane Regulations.

The requirement of the third paragraph is new. The company has a responsibility to make sure that the competent company or person to conduct the annual and five-yearly examination is listed in the NMA's overview of approved companies and persons.

To section 20 Examination after overload of or damage to cranes

This section partly continues section 15 fourth paragraph of the current Crane Regulations but includes new requirements of compliance with the guidelines of the crane supplier, in order to achieve adequate control. Following consultative statements regarding the draft regulations, we have defined the term overload.

The requirement of the fourth paragraph is new. The company has a responsibility to make sure that the competent company or person to conduct the examination is listed in the NMA's overview of approved companies and persons. A separate approved list of persons and companies will be established for mobile offshore units.

To section 21 Examination and certification of loose lifting equipment

The requirement of the first paragraph is to some extent new. The company is responsible for hiring persons with adequate expertise. This assessment is done by the company. The draft Regulations include a specific requirement for a minimum level of qualifications. We have specified this to be the G11K certificate of competence.

The second paragraph continues section 15 fifth paragraph of the current Crane Regulations. A sample of every length and dimension produced shall be taken for wire ropes. When it is impossible to test a full-size piece, threads or parts may be tested to determine the point of breakage, and the strength can be calculated.

To section 22 Pad eyes

This section is new. The substantive content is based on NIS Circ 1-2006, Certification of lifting pad eyes (Lifting Brackets).

The need to carry out a random NDT, cf. fourth paragraph (b), depends on whether or not the pad eye is suspected to have a weakened structure or fastening point after the visual check. A random NDT shall be performed if there is any doubt regarding the pad eye's condition.

To section 23 Material handling

The shipping company will assess the material management plan in relation to the actual need on board. The wording already says that there will be less need for existing offshore units. It is often too late for existing offshore units to make structural design changes based on material handling requirements. This means that the scope of the plan for existing offshore units will be smaller. Due to consultative comments, we have specified that the assessment made by the company must be documented.

To section 24 Use of wire rope and loose lifting equipment

The requirements are new. There are currently no requirements for the storage, inspection and discarding of wire rope and loose lifting equipment. As a result, the specified requirements are given in section 24.

We have made linguistic changes in the first paragraph compared to the circulated proposal and added the possibility of using another standard of the same safety level and scope.

The NMA also received a number of comments regarding a new reference to NORSOK R-003, Rev. 3, June 2017. The NMA has made a provisional comparison of NORSOK R-003, Rev. 2, July 2004, chapter 7 to NORSOK R-003, Rev. 3, June 2017, chapter 7, and we cannot at this point state that the changes are small enough to replace the reference of the 2004 revision with the 2017 revision without having a new consultation. As a result, we have chosen to include references to both revisions. Another standard of the same scope and safety level may also be used.

To section 25 Use of cranes and other lifting appliances

The actual lifting operation is regulated in the first paragraph. We received several comments at the consultation regarding a new reference to NORSOK R-003, Rev. 3, June 2017. The NMA has made a provisional comparison of NORSOK R-003, Rev. 2, July 2004, Chapter 6 to NORSOK R-003, Rev. 3, June 2017, and we cannot at this point state that the changes are small enough to replace the reference of the 2004 revision with the 2017 revision without having a new consultation. As a result, we have chosen to include references to both revisions. The same applies to the third paragraph where there is a reference to both NORSOK R-003, Rev. 3, June 2017 chapter 5 and Rev. 2, July 2004, chapter 5.

Following consultative statements regarding the draft regulations, we have made it possible to use the shelf authority's requirements for use of cranes and other lifting appliances as an alternative to NORSOK R-003 for mobile offshore units on a foreign national shelf if the shelf authority's requirements have an equivalent scope as set out in NORSOK R-003.

Other paragraphs are in line with the usage related to this area, and we see it appropriate to specify this in the Regulations in order to avoid any doubts.

The third paragraph mainly continues section 18 of the current Crane Regulations, with linguistic changes, and refers to the entire chapter 5 not only 5.3 of NORSOK R-003. Transfer of personnel will primarily be done by helicopter. This may, for different reasons, not always be possible. Therefore, there may be special reasons to make such transfer necessary, cf. the third paragraph (a). The consultation's third paragraph (c) refers to NS-EN 13852-1:2004, 7.2.5. There were comments that the reference should be to the 2013 version of the standard. The NMA has compared the two versions, and in our opinion the changes made are not significant. As a result, the reference has been changed to reflect the 2013 version.

To section 26 Exemptions

Shipping companies applying for exemption are not entitled to have this granted even if the terms of the exemption provision are met. The starting point is that the requirements of the Regulations shall be met. Only in extraordinary cases, where warranted by valid grounds and the shipping company establishes that it is justifiable in terms of safety, will there be an opening for exemption.

The NMA will have an exemption practice in line with the current practice.

A statement from the safety representative(s) shall be attached the shipping company's application for exemption. If there is no safety representative, e.g. in the construction phase, the requirement will not apply. Statements from the shipping company's senior safety representative, if there is one in the company, should be attached.

To section 27 Transitional provision

Based on the transitional provision in section 27 first paragraph, the requirements of appendix I may be complied with until the next certificate issue, instead of section 6 to 24, with the exception of section 13 of the Regulations. Appendix I comprises the material requirements of the current Crane Regulations. When a new certificate has been issued, appendix I may no longer be used.

The transitional provision in the second paragraph provides the competent person type A-1 with the opportunity to carry out examinations until 1 January 2020 when this arrangement will be discontinued.

To section 28 Entry into force

The Regulations enters into force on 1 January 2018. The current Crane Regulations will be repealed when the new Regulations enter into force.

Administrative and financial implications

We believe that the new Crane Regulations will be more user-friendly, and it will be more cost-saving for the industry to be able to buy crane and lifting equipment as "off-the-shelf products" without having to adapt the equipment to comply with special provisions or apply for exemptions.

The requirements of section 3 mean that competent persons type A-1 who are not connected to a company will not be able to carry out examinations after 1 January 2020, cf. section 27. Competent persons who are type A-1 approved today may be approved as B-1 by application. This way, they will still be able to carry out annual and five-yearly examinations of cranes. All companies wishing to be approved as a competent company must apply. We are familiar with seven persons in the NMA's overview of approved competent persons type A-1 who are not currently connected to a company. We do not know, however, if any of these persons have completed an initial certification on a Norwegian mobile offshore unit during the last ten years. Hence, our conclusion is that there are few or no consequences for the industry.

The requirements of section 5 second to fifth paragraph are not considered to have significant financial consequences.

The requirement of section 8 second paragraph may result in extra costs for mobile offshore units installing new offshore cranes, or if already supplied/installed cranes are rebuilt in order to have the emergency operation function available within one minute (for lifting of personnel). The costs will vary depending on the crane.

To section 10

The requirements in section 10 will not have any significant financial consequences for the industry.

To section 13

The requirements will not have any significant financial consequences for the industry.

To sections 16, 19 and 20

The requirements of these sections will not have any negative financial consequences. For some Norwegian offshore installations savings may be made when examinations are only to be carried out by a MOU classification society or a competent company type A-1 (not both).

To section 21

We assume that the person or company issuing the current certificates already has these qualifications, and that this requirement will not lead to additional costs for the company.

To section 22

The requirements for pad eyes are not regarded to have significant financial consequences. This is a continuation of the current practice.

To section 23

As far as we know, this is already a requirement set out in the Norwegian shelf regulations on the Norwegian continental shelf, and the consequences will therefore be minimal or non-existent.

To sections 24 and 25

The requirements are considered to have few or no consequences.

Lars Alvestad
Acting Director General of Navigation and Shipping

Linda Bruås
Acting Head of Department

This document has been electronically approved, and therefore does not contain handwritten signatures.

Attachments:

Regulations on cranes and lifting operations on mobile offshore units

Consultation matrix