

Standard for the inspection of wire rope used on ship's lifting appliances in New Zealand

Interim Technical Note (ITN-11-18)

December 2018

General Purpose

The intent of this Interim Technical Note (ITN) is to provide clarification in respect of the complying with maritime rules in relation to the standard for inspection of wire ropes on ships' lifting appliances. ITNs provide supporting information on specific technical issues or areas related to maritime rules or marine protection rules. The material in this ITN should not be treated as a substitute for the rules, which are the law. This ITN may be replaced with or clarified by operational guidance or an advisory circular at a later date. Any future guidance is unlikely to apply retrospectively.

Application

This ITN applies to all ships to which Maritime Rules Part 49 applies. The purpose of this ITN is to clarify the inspection standard relating to lifting appliances and loose cargo gear, particularly wire ropes on foreign flagged vessels.

Background

With concern over the number of failures or near failures involving wire ropes on foreign flagged ships in New Zealand ports, Maritime New Zealand has consulted and worked with experienced crane surveyors, ship owners, stevedores and vessel charterers to determine the standard to be used in New Zealand, taking into account Maritime New Zealand's Safety Bulletin 11-2007 <https://maritimenz.govt.nz/commercial/safety/safety-updates/safety-bulletins/documents/Issue11-mnz-safety-bulletin-june-2007.pdf>

Standard for Care and Maintenance, Inspection and Discard

In light of the obligations under Maritime Rule 49.4(1) and 49.4(2), and noting that the Director of Maritime New Zealand can recognise a certificate of test issued under the Maritime Rule (see Annex), the Director considers that effective from 01 March 2019, care and maintenance, inspection and discard undertaken in accordance with **ISO 4309:2017: Cranes -- Wire ropes -- Care and maintenance, inspection and discard**, (as amended) meets the standards required for compliance with Maritime Rules and will expect to be presented with documentary evidence of such, on request to the Master.

Annex.

Provisions and Requirements

Maritime rule part 49 requires that lifting appliances and loose cargo gear hold a certificate of test and that every lifting appliance and item of loose gear should be maintained in good repair and working order. The rule is silent as to the criteria and standard to which this equipment should adhere.

Maritime Rules Part 49

49.4 General

(1) Subject to rule 49.5(7), the owner and master of a ship must ensure that a certificate of test is obtained for every lifting appliance and every item of loose gear carried on the ship and that the validity of the certificate of test is maintained.

(2) The owner and the master of a ship must ensure that every lifting appliance and every item of loose cargo gear carried on the ship is maintained in good repair and working order.

(4) No person may use a ship's lifting appliance or item of loose cargo gear unless there is in force for that lifting appliance or item of loose cargo gear a valid certificate of test.

49.7 Inspection of ship's loose cargo gear

(1) The master of a ship must ensure that every item of loose cargo gear is inspected by a responsible person before it is used.

(2) If on inspection the responsible person considers an item of loose cargo gear to be unsatisfactory, no person may use that item of loose cargo gear until any defect is remedied to the satisfaction of a competent person.

(3) The responsible person must record in the register of equipment required by rule 49.9 any item of loose gear that is, on inspection, found to be unsatisfactory. (2)

Clarification

• Meaning of “lifting appliance”

Lifting appliance means for the purposes of rules 49.4 to 49.11 inclusive any stationary cargo-handling appliance on board a ship used for suspending, raising or lowering loads or moving loads from one position to another while they are suspended or supported. For the purposes of rule 49.12 it means any appliance or gear fitted in or carried by the ship and used in the ship's machinery spaces to lift any item associated with the operation, maintenance and servicing of such spaces

• Meaning of “loose cargo gear”

Loose cargo gear means an article of equipment by means of which a load can be attached to a lifting appliance but which does not form an integral part of the appliance or load. Loose cargo gear includes any steel wire rope, shackle, block, hook, clamp, tray, crate, tub, grab, or other receptacle used to convey any cargo, personnel cradle,

pallet bar, connecting plate, swivel, ring, chain, beam sling, overhauling weight, lifting beam, spreader, lifting frame, magnetic lifting device, vacuum lifting device or any other similar device that is designed or used to facilitate loading or unloading of cargo; but does not include containers as defined by the International Convention for Safe Containers 1972 (CSC):

- **Meaning of “certificate of test”**

Certificate of test means a certificate of test issued under this Part of the General Harbour (Safe Working Load) Regulations 1982, or recognised by the Director under the Act.

Typical Enquires and Answers

Question 1

The manufacturer’s instructions specify care, maintenance, inspection and discard requirements different to ISO 4309:2017, can we follow the manufacturer’s requirements instead?

Answer: Maritime New Zealand recognises ISO 4309:2017 as the minimum acceptable standard for operation in New Zealand. Manufacturer’s instructions may be adhered to, provided the requirements meet or exceed the requirements of ISO 4309:2017 and that sufficient documentation can be provided to ensure the specified rope is fitted to the lifting appliance. In all cases ISO 4309:2017 is the standard minimum standard which shall be applied.

Question 2

My ship does not fly the flag of New Zealand, does Maritime Rule: Part 49 apply?

Answer: Maritime Rule: Part 49 applies to any item of loose cargo gear carried on a New Zealand ship **and** every lifting appliance on a foreign ship that is used for working cargo in New Zealand **and** any item of loose cargo gear that is carried on a foreign ship and is used for working cargo in New Zealand.

Question 3

What documentation do I need to show that the lifting appliances and loose gear is in accordance with ISO 4309:2017?

Answer: If requested to provide documentary evidence that lifting appliances and loose gear is in accordance with ISO 4309:2017, records of maintenance, procedures for maintenance, attestation of inspection or any other evidence which effectively proves compliance to the director may suffice.

Question 4

My ship has undertaken significant cargo work with different cargos since the issue of the annual certificate of test. Should I have the wire ropes re-inspected to standard ISO 4309:2017 prior to visiting New Zealand ports?

Answer: Rule 49(2) requires that every lifting appliance and every item of loose cargo gear is maintained in good repair and working order. It is recommended that if there is any question regarding the repair and working order of the wire ropes that they are inspected in accordance with ISO 4309:2017 prior to visiting New Zealand.