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CR Classification Society

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**RULES FOR THE CONSTRUCTION AND
SURVEY OF CARGO GEARS 2013**

AMENDMENT No.1

March 2016

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SURVEY OF CARGO GEARS 2013**

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The following Chapters have been amended and the effective dates are:	
Chapter	Effective date
1	March, 2016

The Rules for the Construction and Survey of Cargo Gears 2013 thereof is to be read in conjunction with this Amendment.

List of major changes from 2013 edition

1.4	New	1.5(n)	New
1.4~1.6	Renumbered		

Rules for the Construction and Survey of Cargo Gears 2013 has been partly amended as follows:

Paragraph 1.4 has been added as follows:

1.4 Ships equipped with heavy lift appliance (see 1.5(n)) in accordance with the Rules will be assigned the notation **HLA**.

Paragraph 1.4~1.6 has been renumbered, and 1.5(n) has been added as follows:

~~1.5~~ 1.5 The terms used in the Rules are defined as in the followings:

- (a) Cargo gears – lifting appliances and loose gears, where lifting appliances are derrick systems, cranes, cargo lifts, cargo ramps and other machinery used on board for the loading and unloading of cargoes and other articles and include their installations of driving systems, cargo fittings.
- (b) Loose gear – blocks, ropes, chains, rings, hooks, links, shackles, swivels, clamps, grabs, lifting magnets, spreaders, etc., which a load can be attached to a lifting appliance but which does not form an integral part of the lifting appliance or load.
- (c) Safe working load (*SWL*) of the cargo gear assembly – the maximum allowable load of the cargo gear approved to operate safely excluding the weight of the cargo gear itself.
- (d) Safe working load (*SWL*) of the loose gear – the maximum allowable load upon the loose gear in the designed conditions assumed.
- (e) Proof load – the load of the test provided in Article 4 of the Rules applied to prove that the cargo gear has the capacity for loading and unloading with the safe working load.
- (f) Derrick system – installations including derrick posts or masts, stays, booms, goose necks, eye plates, winches and running gears for handling cargoes by suspending the cargo from the top of the derrick boom in hoisting, lowering, luffing and slewing motion. Union purchase derrick system is that a pair of derrick booms, on port and starboard sides, are fixed predetermined positions. The cargo falls of two derricks are connected to load or unload the cargo.
- (g) Crane – jib cranes, gantry cranes, overhead cranes and hoists, cargo davits, etc. and are capable of performing the work of cargo loading and unloading, in slewing and/or horizontal movement simultaneously or separately.
- (h) Cargo lifts – the installations designed to contain the cargo in their structure to loading and unloading the cargo.
- (i) Cargo ramps – the installation mounted on the shell or provided in the ship, and arranged to permit passage of vehicles as cargo or vehicles loaded with cargo on themselves and having mechanism enabling its opening and closing or turning.
- (j) Allowable minimum angle – the minimum angle to horizontal of a derrick boom at which the derrick system is permitted to operate under the safe working load.
- (k) Maximum slewing radius – the maximum radius at which a jib crane is permitted to operate under the safe working load.
- (l) Cargo fittings – goose neck brackets, derrick heel lugs, fittings attached to head of derrick booms, etc. which are permanently fitted to the lifting appliances or the hull structure for the purpose of cargo handling.
- (m) Acceleration of gravity (*g*) – 9.81 m/sec².
- (n) Heavy lift appliance – Cargo gear with safety working load not less than 160 tones on the main hoist falls.

~~4.5~~1.6 When an application of newly installed cargo gear for registration is made to the Society, the following plans and calculations are to be submitted for consideration:

- (a) General arrangement of the cargo gear.
- (b) Force diagrams and strength calculations
- (c) Construction drawings.
- (d) Details of loose gear.
- (e) Drawings of safety devices and protective devices.
- (f) Construction drawings of the installation of driving machinery.
- (g) Power system diagram.
- (h) Drawings of operation and control system.
- (i) Other drawings and documents as deemed necessary by the Society.

~~4.6~~1.7 The submission of drawings and data for existing cargo gear is generally to be the same as prescribed in ~~4.5~~1.6. However, partial omission of these drawings and documents may be accepted by the Society if the former inspection records and certificates are found satisfactory.