

Maritime New Zealand Notice

SAFETY BULLETIN ISSUE 33 – FEBRUARY 2016 (Supersedes Issue 27)

Crane Block Failures on IHI and IHI-WMMP Deck Cranes

This safety bulletin is for:

- stevedores in New Zealand ports
- ships' agents and ship operators
- Classification Society surveyors
- competent persons (as defined in *Maritime Rules Part 49: Ships Lifting Appliances*)
- MNZ Maritime Officers
- port companies

Purpose of this bulletin

The purpose of this safety bulletin is to:

- draw attention to a number of recent crane block failures on IHI and IHI-WMMP deck cranes on log ships
- make available advice from the manufacturer as to the correct operation of the cranes and their recommended remedial action.

Background

There have been a number of failures of crane blocks on 30 tonne IHI deck cranes on log ships in New Zealand in previous years. Fortunately there have been no serious injuries as a result of these failures to date, but any crane failure is potentially very serious.

The crane manufacturer, IHI Corporation, have updated their previous advice issued in June 2011 about potential modifications to the blocks on this type of crane, as detailed in the attached bulletin (IHI ref. QAS-0021A, 15 November 2013), to eliminate or reduce the incidence of such failures.

IHI highlights two possible causes of these failures. In the first instance, IHI suggest that in one case, the crane operator continued the lowering operation when a case on the cargo block body came into contact with a structural plate in the corner of the hatch coaming. This resulted in a bending of the case due to excessive force.

In the second case, IHI highlight a situation where cargo being lowered started swinging. This resulted in the cargo block colliding with the wall of the cargo hold.

No independent evidence has been presented to support IHI's views and guidance, and there may well be other factors involved in the failures. While Maritime New Zealand (MNZ) is providing a copy of IHI's updated bulletin to highlight safety issues with the cranes, MNZ is not in a position to endorse IHI's views as regards to the cause of failure, nor the associated advice.

Guidance

- **Crane operators and ship operators** should check, as a matter of good practice, before cargo handling commences, that all crane components are in good condition and there is no sign of damage or excessive wear to crane blocks
- **Ship operators** should take note of the crane manufacturer's recommendations for modifications to crane blocks and undertake remedial action as they see fit. IHI suggest either an additional bolt, or additional plate is used to reinforce the cargo block.

- **Competent persons and ship operators** should ensure that if, after consideration of the manufacturer's recommendations, modifications to crane blocks are carried out (either permanent or temporary modifications or any repairs), that this work is appropriately certified. Standards for testing, inspection and examination of cranes on ships are covered by *Maritime Rules Part 49: Ships' Lifting Appliances*. In undertaking any testing, inspections, repairs or modifications of ships' cranes, the requirements of Part 49 must be adhered to
- **Crane operators** should ensure that they adhere to the crane manufacturer's specified operating parameters and loading limits at all times, and be aware of the potential for failure caused by incorrect lifting

Further information

For further information, please contact Maritime New Zealand's Wellington office:

Ph: 0508 22 55 22 or (04) 473 0111

Fax: (04) 494 8901

Email: enquiries@maritimenz.govt.nz