

### TECHNICAL CIRCULAR No. 364 of 10th September 2016

To:	All Surveyors/Auditors	
Applicable to flag:	All Flags	
Subject:	Cargo Gear Inspections	
Reference:	CONARINA Class	

# Cargo Gear Inspections

## Annual Survey

After the original test and examination each crane is required to undergo an Annual Survey at intervals of 12 months. The Annual Survey should include the following: -Visual inspection of the crane structure for deformation, excessive wear, corrosion, damage or fractures, as necessary. The boom is to be lowered for this examination. -Visual examination of crane hooks for deformation. excessive wear or fractures

-Visual external examination and operational test of crane machinery including prime mover, clutches, brakes; hoisting, slewing and luffing machinery

-Visual inspection of wire rope including end attachments

-The slewing ring assembly, where applicable, is to be examined for slack bolts, damaged bearings and deformation or fractured weldments

Functional tests including main and auxiliary load hoisting and lowering, boom raising and lowering, slewing (swinging), safety protective (fail-safe) and limiting devices and load and boom angle or radius indicators

Annual Survey will be noted in the Register of Lifting Appliances.

### Re-testing Survey

At intervals of five years, in addition to the Annual Survey above, the crane is to undergo testing and examination. If movable weights are not available for proof tests, a dynamometer or load cell may be used in lieu of weights, provided that the tests are repeated at two locations, at opposite sides of the slewing circle.

The slewing ring assembly including bolting arrangements and foundation are to be examined for slack bolts, damaged bearings, and deformed or fractured weldments. As deemed necessary by the surveyor, analysis of slew ring grease samples for metal

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particles and NDT examination of the slew ring for fractures or damage may be required. Additionally, a representative sample, consisting of a minimum of 25 percent of the total number of slewing ring assembly bolts, is to be removed and examined by a suitable nondestructive testing method.

Upon completion of proof tests, the critical welds of offshore crane pedestals are subject to the following nondestructive testing to the satisfaction of the attending surveyor:

-Volumetric NDT of all critical butt welds in the crane pedestals, including any transition pieces between the pedestal and crane slew ring

-NDT of critical fillet welds in the pedestal and transition pieces

Re-testing will be noted in the Register of Lifting Appliances.

# Load Testing

Initial load tests are to be carried out with weights

Retesting can be carried out with load cells; however, test must still be carried out at 3 radii

Load cell on crane is not sufficient, must be separate, calibrated load cell.

**REFERENCES**:

## - CONARINA Class

ATTACHMENTS: No.

Kindest Regards, Cosmin Bozenovici Naval Architect – Conarina Technical Head Office

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