

# **Surveyor's Notebook – Part III**

## **EQUIPMENT**

### — CRANES

Cranes must be suitable for lifting personnel. Freefall or non-powered lowering arrangements should not be used.

A crane is a lifting appliance. On a ship, a lifting register is maintained, recording inspections, tests and overhauls of the equipment. The International Labour Organisation (ILO), a United Nations agency, governs the testing and examination of lifting gear on board ships of those flags that are signatories to the ILO convention, unless otherwise regulated by the Flag State. The ILO Occupational Safety and Health (Dock work) Convention 1979 (No. 152) applies to most ships. The convention lays down the regime for inspecting and testing wire rope, and maintaining records.

Cranes are, by their nature, subject to heavy usage, and the component parts – wires, blocks, hooks, brakes, operating controls, levers and handles, and hydraulics – are subject to damage. Rigorous inspection and testing is required to ensure that the equipment is maintained in good order. Company procedures with respect to lifting gear should be clear and unambiguous.

Because the ILO convention dictates the requirement for lifting appliances, there is a grey area regarding the use of lifting equipment normally fitted to lift cargo or cargo hoses being used for the purposes of transferring personnel.

European Community directives 89/655/EEC and 95/63/EC, for example, do not prescribe measures to be taken by an employer, but instead place the onus on the employer to ensure that all the lifting equipment fitted on a ship is appropriate for the intended purpose and is safe to use. The hose cranes used for offshore basket transfer for example should be reviewed to determine whether they are fit for the purpose of transferring personnel. The UK Maritime and Coastguard Agency, for example, in the marine Guidance Note MGN 332 – Merchant Shipping Lifting Operations and Lifting Equipment Regulations 2006, regulation 7, states:

“Lifting Equipment for lifting persons.

1. The employer shall ensure that, except under the conditions required in (2), no lifting equipment shall be used for the lifting of persons unless it is designed for the

purpose.

2. If in exceptional circumstances it is necessary to use lifting equipment which has not been specifically designed for the purpose, to lift persons, the employer shall ensure that:
  - the control position of the lifting equipment is manned at all times; and
  - persons being lifted have a reliable means of communication, whether direct or indirect, with the operator of the lifting equipment”

MGN 332 continues to state under regulation 9 – guidance note: “The lifting of persons must only be carried out using appropriately designated and marked equipment. No other equipment should be used for the purpose.”

Therefore any lifting equipment of crane that has been designated for lifting personnel should be:

- reviewed that it is fit for transfer of personnel
- clearly marked that it is also used for that purpose
- included in the ship’s planned maintenance system
- given enhanced inspection and testing, including by competent authorities ashore – this could include a routine changing of the hoisting wires and hooks, for example

Class can be approached to inspect and test cranes, particularly where the cranes are used for transferring personnel. Class would have to be specifically requested to classify such a crane as this would not normally be done.

#### — RISK ASSESSMENT

In addition to the above, the following factors should be taken into account when carrying out the risk assessment:

- the necessity of the transfer
- the viable alternatives
- the limitations of the crane being used (reach/speed of lift, luffing raising/lowering)
- the presence of any obstructions during the lift

#### — CONCLUSION

The issue of transferring personnel at sea is not a normal operation for most ships. It is also an operation that has not been regulated for and therefore if a personnel transfer has to go ahead good practices should prevail.

Using lifting equipment for transferring personnel is a high-risk operation. It should

not be undertaken lightly and all of the above should be considered by ships engaged in transferring personnel at sea using the ship's lifting equipment.

*(Article extracted from The Standard Club's publication – Standard Safety)*