Case Study

Hand injury from falling lid

Category: Personal injury - illness
Vessel type: Tankers: Petroleum
Issue date: 02/10/2012
Case number: 201234

The below Case study has been taken from: Nautical Institute’s Mars Reporting Scheme

The incident
The crew on board a tanker was engaged in lifting some light loads out of the pump room stores hatch. The lid was raised to its open position and secured at only one of the two hinges, using a mild steel (MS) bolt. The crew then began the task of lifting out the loads by attaching a tackle to a dedicated padeye on the underside of the open lid. Suddenly, the open hatch lid dropped unexpectedly on to the coaming, inflicting severe crush, cut and fracture injuries on the right hand of a deck rating. The injured person was given first aid on board and was further treated ashore before repatriation.

Root cause/ contributory factors
• Inappropriate operation – the lid was fitted with a padeye of approved strength on the underside to be used for the lifting and handling of loads inside the pump room, but only with the lid properly secured in the fully closed position. In this incident, the crew not only failed to properly secure the lid in the open position, but wrongly used this fitting to lift loads out of the hatch with the lid held in the open position
• A single, non-standard pin (MS bolt without a check-nut) was used to secure the hatch lid in the open position. It is suspected that the bolt was not passed all the way through the lugs of the hold-back arrangement of the lid
• The crew failed to carry out a proper risk assessment, possibly because of the light loads (bundles of staging aluminium pipes) being handled.

Observations: corrective/preventative actions
• The incident was discussed at a special safety meeting
• All hatch lids were fitted with securing pins as per original specifications and these were permanently attached with keeper chains
• All hatch lid securing arrangements were painted yellow and a prominent warning stencilled on them to ensure that the lid is properly secured when in the open position
• The padeye on the underside of the hatch lid was similarly marked, specifying it is to be used only when the lid is properly secured in the fully closed position.

Lessons learnt
• Lifting loads must always be considered a risky task, regardless of the weights being handled, and must be preceded / controlled by proper risk assessments, work planning and supervision.
• Engine and pump room hatch lids can be very substantial in construction, and very heavy. Securing arrangements, especially in the open position, must be carefully inspected and properly used; even if the lid is to be kept open only briefly.
• Work teams must be enabled and encouraged to identify and break a developing ‘error chain’.