

Lifting eyebolt failure

This Alert is issued to inform those involved with and part of Lifting Operations particularly the following:

- All personnel responsible for the planning and supervision of lifting operations
- All Appointed Persons Lifting Operations and Slinger Signalers

Summary

- **During a recent lifting operation to lift a Comacchio 205 drilling rig one of the lifting eyebolts fitted to the machine failed**

A Comacchio 205 drilling rig weighing 2.9t was in the process of being lifted by crane. The rig was slung as detailed in the manufacturer's information using two 7.5t twin leg chain slings attached to the designated lifting points on the rig using 6.5t Bow-shackles.

This type of rig is fitted with two integral welded lifting points at the front and two detachable collared lifting eyebolts at the rear. As the crane took up the load one of the lifting eyebolts failed.



Rig following the incident



Sheared eyebolt left in the rig



Bow shackle attached to the Lifting eyebolt

The collared lifting eyebolts fitted to the rig had been considered an integral part of the rig and had not been subject to the six-monthly thorough examination required under the Lifting Operations and Lifting Equipment Regulations (LOLER).

Lifting points that can be easily removed, such as screw in lifting eyes, should be treated as lifting accessories and subject to six monthly thorough examination. Lifting accessories should be tagged with the correct color code and be subject to weekly inspection and recorded.

The suitability of the collared lifting eyebolts and the angle the load would have been applied had also not been considered when planning the lifting operation. Where the load is applied 90 degrees to the axial, the WLL of a collared eyebolt must be reduced to take account of the different stresses imposed.

When planning a lift using eyebolts the manufacturer's information must be used to establish the suitability of the eyebolt and any reduction in the WLL necessary due to the nature of the lift. When using multi-leg slings the slinging angle must also be considered when assessing the suitability of lifting accessories.

An integral lifting point is a dedicated part of the load provided for the sole purpose of attaching lifting accessories. Integral lifting points should be subject to regular inspection as part of the planned preventative maintenance of the equipment, as required by the Provision and Use of Work Equipment Regulations (PUWER).

When planning to lift a load with integral lifting points the Appointed Person must ascertain with the supplier if the lifting points have been inspected and if a record of the inspection is available. If a record of inspection is not available, the project must arrange for the lifting points to be inspected by a competent person prior to use.

