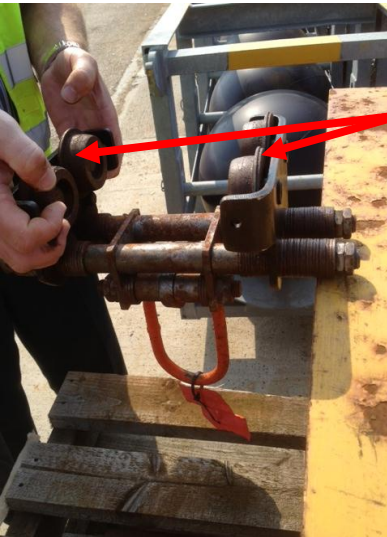


Lessons Learned

“Beam Trolley Dislodged from Gantry Beam”

What happened?

On the 18th May 2012 the wells team were performing well operations on the Bessemer installation involving a lubricator suspended from the overhead gantry crane. At 13:05hrs a member of the team identified that one of the wheels had come off the side of the beam and the second wheel had only a limited contact. Work stopped immediately. The lubricator and lifting equipment (including the beam trolley) were safely recovered to the deck and an investigation initiated.



Why did it happen?

Beam Trolley was incorrectly sized for the gantry beam (the wheel flanges were set approximately 11mm wider than they should have been):

The clearance between the wheel flanges (as shown on photo 1) on the beam trolley was 225mm, whereas the actual distance of the beam was 210mm. This gives an over sizing of 15mm.

Section 12.9 of the North Sea Lifting Rules (Safe Use of Beam Trolleys) states that the correct clearance should be between 1.5 to 2mm, therefore the maximum permissible clearance should have been no greater than 4mm.

Taking into account the maximum recommended clearance of 4mm, the clearance would have exceeded this by 11mm

Indirect Causes?

- Beam trolley was not installed by competent person and the fact that the beam trolley was too wide for the beam was therefore not identified during installation.
- Neither the onshore responsible supervisor nor the offshore crew using the equipment were expecting the beam trolley to be out of tolerance and assumed the beam trolley was supplied ready to be installed and used.

Root Cause?

- Lack of understanding (both onshore and offshore) of the level of competence required for the installation of a beam trolley. Installation of a beam trolley is considered to be a ‘rigging’ operation and therefore requires a minimum competency of OPITO Stage 3 Rigger.

Lessons Learned

The installation of a beam trolley constitutes a ‘rigging’ operation and by its very nature requires (as a minimum) an OPITO Stage 3 Rigger to perform this task. This was not identified at either the planning or implementation stages of the programme, therefore no provision was made for a OPITO Stage 3 Rigger, which ultimately led to the beam trolley being misaligned on the gantry beam during operation due to the fact that it was installed incorrectly.