



Use of Gravlocks in Rigging



INCIDENT

In October 2004, a scaffold tube and attached rigging weighing 21.5 kg, fell 12 m from its attachment to the ground. It hit two workers below seriously injuring them.

CIRCUMSTANCES

The scaffolding was part of a system to raise and lower two large lighting platforms, which were suspended from universal beams in the roof. The platforms were raised and lowered by chain hoists and motors. Moving the platforms horizontally along the set required manual hauling on a rope through a pulley system. This pulley system was anchored at each end of the building and attached to the universal beams using a girder clamp known as a 'gravlock'. Only one gravlock was used at each end of the scaffold tube and attached to the inside flange on each beam.

As the platform was being lowered to the ground, the rope became caught. The tension ripped one of the scaffold tubes off the universal beam causing it to bring down the lighting stage and injuring the workers below.

INVESTIGATION FINDINGS

The scaffold tubes were incorrectly attached to the beam. Only one gravlock was used at the point of contact.

Manufacturers' instructions are clear that gravlocks must be used 'in pairs'. This means that two gravlocks should have been used at the point of attachment to the universal beam.

Had there been two gravlocks used correctly as a pair, on the inner and outer flanges of the beam, this accident would have been avoided.

This investigation has identified confusion amongst riggers and scaffolders in regard to the interpretation of what a 'pair' of gravlocks means. The following clearly shows the recommended use of a pair of gravlocks.

RECOMMENDATION

Ensure all gravlocks are used in pairs as indicated in the photo on the right.

WHICH INDUSTRIES/SECTORS OR MATTERS WILL THIS INFORMATION BE RELEVANT TO?

Construction industry



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