

Are your pads up to scratch?

The UK's Health and Safety Executive (HSE) has recently been on the lookout for sloppy cribbing and make-do outrigger pads used with lifting equipment. The days of carrying old railway sleeper off cuts and mixed assortments of timber as outrigger pad substitutes is coming to an end. C&A reports.

It is true that most reputable crane owners have already equipped their cranes with purpose built synthetic mats or purpose made timber mats. However, even some of the best companies rarely provide enough purpose made timbers to allow for safe levelling under the outriggers pads.

Several readers have reported that their crane drivers have been warned and even stopped on site and instructed to replace scrappy collections of timber with purpose made mats. But there really shouldn't be any excuse because the range of purpose made mats and shoring material produced for the job of spreading outrigger loadings is now very wide and readily available.

It is a sorry fact that the majority of crane, lorry loader and truck-mounted aerial lift accidents are due to problems with outrigger set up. A common incident involves small outrigger pads punching through weak surfaces or sinking in soft ground.

Some of the worst offenders are smaller "taxi cranes", truck-mounted aerial lifts and lorry loaders, largely due to the fact that they are used on routing lifts or applications that are subject to less planning and investigation than larger lifts. The latter two categories are particularly at risk due to their use by operators less familiar with the equipment. On the other hand, cranes in the 30- to 60-tonne category, common in most small companies' fleets

can create very significant outrigger pad loadings and are more likely to need mats.

When it comes to outrigger mats and shoring, individual timbers are very versatile, but require more skill. Expect knowledgeable inspectors to frown on gaps left between timbers and sloppy placement.

Redundant railway sleepers are a good source for timber mats. Cut to size they can make a reliable foundation for crane outrigger jack pads, but great care is needed in their placement beneath a crane. On uneven ground, a method of making certain that the sleepers are kept in place and do not move under load may be necessary, which could include a steel plate positioned on top to tie in the sleepers together.

Care needs to be taken when handling though, as timber can, and will, splinter if handled roughly. These splinters could easily penetrate the hands of the unwary, causing very unpleasant wounds. Timber will absorb moisture and in extreme low temperatures will freeze. Thus, poorly positioned timber cribbing could break up under the load.



Recycled polyethylene pads provide a good foundation of known sizes and density.

way as to allow loading ensuring equal axle weights. The polyethylene material also allows engraving to be carried out, providing an identification of the owner. Polyethylene pads can be made in special sizes to accommodate particular low ground bearing pressures and some forward thinking crane rental companies have placed a set or two in their depots ready for the jobs that require them.

It would not be correct to say that site safety inspectors or the HSE spend their days looking for trouble, an HSE inspector recently stated, "We do have a



Neat outrigger pad provision and storage on a Ruthmann truck-mounted boom lift.

Recycled polyethylene pads provide a good foundation of known sizes and density along with other additional benefits. The pads will not splinter, will not absorb moisture, are safe, are unbreakable under normal working conditions, will adapt to the working surface and will return to the original shape after use.

Standard rope or chain handles allow for ease of handling and when not in use are easily stored in a crane's purpose built racking. Having a known weight, the pads can also be positioned in such a



Outrigger pad provision and stowage on a Bison 3.5-tonne truck-mounted platform, now part of the Palfinger portfolio.

responsibility to encourage safe practice, as it's our job to do so." And as safety starts at ground level, if your crane is standing on firm ground and with the right tools, then so will it remain!



Pictured is a Manitou telehandler rigged as a crane and supported by the correct use of purpose made outrigger pads.