
	Construction Plant-hire Association Tower Crane Interest Group					
	Tower Crane Technical Information Note					
TIN 010	Tower Crane Anti-Collision Systems					
<p>Clause 10.7.4.4 of BS 7121-5 <i>Code of Practice for Safe Use of Cranes – Part 5: Tower Cranes</i>, states that :-</p> <p><i>“These devices (anti-collision systems) are a useful aid to the operator when operating on multi crane sites but should not be relied on exclusively in place of operator vigilance and a safe system of work.”</i></p> <p>Clause 15.2 states that :-</p> <p><i>“In multiple tower crane installations it is essential to have a “anti-collision radio” system installed. This comprises of a separate radio in each tower crane cab operating on a unique frequency to allow open unimpeded communication between all tower crane operators. In the event of the jib or counter jib of one crane approaching the hoist rope of a higher crane the operator of the higher crane can immediately warn the operator of the lower crane.”</i></p> <p>If anti-collision systems are to be used, they should be considered as part of the overall planning of the tower crane installation. The anti-collision system supplier should be consulted at an early stage in the planning so that any technical issues can be resolved. Orders for equipment should be placed in sufficient time for the supplier to obtain the system, install and commission it, well before the cranes are put into service. Consideration should also be given to the training of operators and service personnel, maintenance, availability of spare parts and breakdown response time from the supplier. Operators and supervisory personnel need to be very clear that they are aware of when the system is working and when it is not. If the system fails, operators need to know immediately so that they can be additionally aware of the jibs, hoist ropes and loads of adjacent cranes.</p> <p>It should be borne in mind that an anti-collision system will only warn the operator of the proximity of other tower cranes, it will not warn of the proximity of other high reach mobile plant such as mobile cranes, crawler cranes and concrete placing booms.</p>						
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