



Network Rail
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Network Rail Safety Bulletin

Prohibition of JOST JTL 108, JTL 158 and JTL 208 Tower Cranes

For the attention of Senior Asset Protection Engineers, Asset Protection Project Managers, Principal Contractors, Project Managers and Site Supervisors

Background

Following the collapse in high winds of a JOST JTL158.6 luffer crane in Croydon, London on 25 January, 2014, JOST Cranes (JOST) has undertaken an investigation to determine the cause of the failure. Three other failures of JOST crane jibs had been reported in the twelve months previous.



Investigation

The investigation determined that the operator had failed to leave the slewing brake off when out of service as described in the JOST Operating Instructions. This resulted in wind loading that exceeded the capacity of the jib, causing collapse of the structure.

HSE have also scrutinised the design of these cranes and have determined that although the designs are compliant to all applicable standards, the strength of the mast is "marginal" when compared to anticipated wind loading in the design condition, and that there is reasonable scope to make these cranes safer by design in accordance with the best practice hierarchy for risk reduction.

JOST have proposed some improvements to their crane design which will enhance the ability of the cranes to resist high wind loads. These modifications are detailed in the document 'Improvements on JTL Cranes' v4, which can be obtained by emailing Luke Tandy at luke.tandy@networkrail.co.uk.

Immediate Action Required by Users

All JOST JTL 108, JTL 158 and JTL 208 Tower Cranes are prohibited from being used either directly by Network Rail or by any Principal Contractors or sub-contractors for use on, or within the collapse radius of, Network Rail managed Infrastructure or on Network Rail projects until the modifications detailed in the above document have been implemented.

Issued by: Paul Conway, Acting Professional Head of Plant and T&RS