Environmental and Occupational Health & Safety Unit
OH&S Bulletin

Failure of bolts on Satellite Concrete Placing Boom

May 2009

Recently on a Docklands construction site, there was a failure of a number of high tensile bolts used to hold together the upper vertical column splice joint of the satellite concrete placing tower boom; causing the column to come to rest and lean against the concrete slab.

Investigations revealed that the nuts and bolts may not have been the correct combination and may not have been set to the correct torque tensioning for each bolt; resulting in the nut tearing the thread away from the bolt and coming loose. The bolts had been used a number of times, and were of questionable suitability and integrity for the purpose of holding together such a high pressure and load induced piece of equipment.

In line with good engineering practices, and to ensure the safety of all personnel, the CFMEU recommends the following when this equipment is used on your site:

- ✓ use new high tensile bolts and nuts every time the satellite boom is erected on site;
- ✓ ensure the engineer has specified the correct torque loadings for the bolt/nut combination;
- ✓ Always use bolts and nuts with the same proof load designs and strength combinations;
- ✓ Make sure all bolt assemblies are to Australian and DIN Standards,
- ✓ Ensure an engineer supplies a written compliance inspection of the unit that confirms that it has been built to the requirements of AS1418 and AS 2550, and is in a safe condition to use.

The CFMEU OH&S Unit gratefully acknowledges the support of Incolink.
Authorised by Bill Oliver, Secretary, Tommy Watson and John Setka, Assistant Secretaries of the CFMEU Construction and General Division.
www.cfmeuvic.com.au

Environmental and Occupational Health & Safety Unit

OH&S Bulletin

The CFMEU OH&S Unit gratefully acknowledges the support of Incolink.
Authorised by Bill Oliver, Secretary, Tommy Watson and John Setka, Assistant Secretaries of the CFMEU Construction and General Division.

www.cfmeuvic.com.au

SAFETY IS UNION BUSINESS