

SAFETY ALERT – FAVCO 350 TOWER CRANE

Tower Crane Incident – Gold Coast

19th October 2006

Background

A serious incident recently occurred on a Favco 350 tower crane operating at a construction site on the Gold Coast.

The hoist function of the crane inadvertently went into free fall while a personnel box with two workers in the box was suspended from the crane. It is understood that the box dropped in free fall for approximately 4 floors before the hoist brake came into operation. As a result of the speed of the box and brake application, one worker received broken ankles and the other worker a broken heel.

The weight of the box and workers was approximately 2.5 tonne. The crane was fitted with a dual speed drive system on the winch rope drum, including two “Staffa” type hydraulic motors. Each of the drive motors was fitted with a band brake.

Preliminary Findings

Workplace Health and Safety Queensland is currently investigating the incident. The owner of the crane has provided information about the incident as follows:

A strip down of the Staffa hoist motors and hoist relief valve block has found metal contamination in the hydraulic system of the crane. It appears that one of the Staffa motor crank slippers has started to disintegrate and caused contamination to enter the system. The exact cause of the malfunction has not been determined. However, it appears that metal contamination in one of the valves in the hoist relief valve block may have initiated the incident.

A strategy to address the issue is currently being developed. In the interim, owners of Favco 350 tower cranes have agreed not to lift personnel workboxes on this type of crane.

