



ALL APPROVED PERSONS, APPROVED CRANE CONTRACTORS AND REGISTERED CRANE OPERATORS

AUTOMATIC OVERLOAD CUT-OFF FOR MOBILE AND TOWER CRANES

It has come to the attention of the Department that some automatic overload devices installed in cranes had been set to cut-off at loads greater than the specified safe working load. The Department also discovered that some of these overload devices had been intentionally by-passed during operation. The Department would like to warn all parties that such practices are dangerous and unacceptable.

2. In one case, a crane operator relied on the automatic overload cut-off to assist in his operation. Investigation revealed that the cut-off was set at 105% of the safe working load. Using the cut-off as an indicator for overloading condition, the crane operator proceeded to lift under an overloaded condition. This caused the crane to tilt and the load to swing forward, hitting and killed a worker. The Department also discovered through another accident investigation into the buckling of the jib of a crane that the overload cut-off was set at 110% of the safe working load. In yet another case, a crane operator had intentionally by-passed the automatic overload device so as to enable him to lift a heavy load in an overloaded condition. This led to the failure of the mobile tower crane he was operating.

3. The Department would like to remind all crane operators and personnel engaged in lifting operations that it is an offence to load a lifting machine beyond its safe working load. The lifting machine may be overloaded only when directed by an approved person or an inspector for the purpose of testing the machine. **The bypassing of the overload device to enable the lifting of loads beyond the safe working load of a lifting machine is strictly prohibited.** The Department will not hesitate to take legal action against crane operators or any other persons who wilfully bypass such safety devices.

4. All automatic overload devices shall give an **audible warning signal before reaching 100%** of the specified safe working load and the **overload cut-off shall be activated at or below** the specified safe working load. Once cut-off, the crane shall only be permitted to manoeuvre the load into a safe position, e.g. shortening or raising the boom so as to reduce the load radius.

5. **All approved persons are required to test the overload devices during their inspections to ensure that the cranes meet the above requirement.**

Yours faithfully,

SILAS SNG WEE KIAT
for CHIEF INSPECTOR OF FACTORIES

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