

SAFETY ALERT

THE USE OF TELEHANDLERS TO LIFT FREELY SUSPENDED LOADS AND ON SLOPING GROUND

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ISSUE

The dangers of using telescopic handlers ('telehandlers') to lift freely suspended loads ie. loads attached to a lifting point via a sling or other means that allows the loads to swing, and the dangers of using them on sloping ground.

Note: Telehandlers are also known by a variety of names, including multi-purpose handlers/cranes/tool carriers and telescopic forklifts, as well as common proprietary names.

BACKGROUND

A recent serious incident in NSW involving a telehandler has raised concerns over the use of these machines to lift freely suspended loads. Research carried out by WorkCover following the incident indicates that telehandlers that have not been designed to lift freely suspended loads are being used for this operation, therefore placing people at risk. The problem was compounded by the telehandler operating on sloping ground.

CAUSE

A telehandler is a versatile type of mobile lifting plant incorporating a telescopic boom fitted with a lifting attachment. The standard means of lifting is by forks, but telehandlers can be fitted with a variety of attachments for different types of loads. The range of attachments that can be used depends upon the design of the particular telehandler, and these can include a jib for lifting freely suspended loads.

Typically, telehandlers are used to travel with their load. When the load is supported on forks, it should be lowered as close to the ground as possible and the boom retracted during travel. However, when the load is freely suspended, it needs to be elevated to prevent it snagging on the ground or other obstacles. This, coupled with the fact that the load can swing and exert additional dynamic forces on the telehandler, may adversely affect the telehandler's stability. When operating on sloping ground, the potential for instability is increased as the load swings further from the point it is connected to the telehandler.

In NSW, telehandlers are classified as a form of mobile crane and, under the provisions of the *Occupational Health and Safety Regulation 2001* (the Regulation), their design should comply with the Australian Standard AS 1418.5 *Cranes, hoists and winches Part 5: Mobile cranes*. However, the Regulation allows that other standards may be used providing they provide an equivalent level of safety as the Australian Standard.

Most telehandlers used in NSW are designed to a European Standard, EN 1459 *Safety of industrial trucks—Self-propelled variable reach trucks*. This standard specifies the safety requirements for telehandlers used to lift loads rigidly supported by forks or other means, and explicitly excludes the design of machines used to lift freely suspended loads. WorkCover accepts that telehandlers designed to EN 1459 used for rigidly supporting loads

on forks provide an equivalent level of safety to mobile cranes designed to AS 1418.5, but when machines are used to lift freely suspended loads, EN 1459 is deficient as the stability requirements do not cover the machines operating in this configuration. Other deficiencies between the two standards include the absence of some operator safety devices, such as indicators and limiters, and load charts covering the operation.

So, when telehandlers designed to EN 1459 are used for this purpose, they are potentially unstable and represent a risk to persons. **Telehandlers used to lift freely suspended loads by a jib attachment or other means must comply with AS 1418.5.**

WHAT SHOULD BE DONE?

The *Occupational Health and Safety Act 2000* requires employers to ensure the health, safety and welfare at work of their employees. This duty extends to ensuring that plant used at work is safe and without risks to health when properly used. Similarly, a person who designs, manufactures or supplies plant for use by people at work also must ensure that it is safe and without risks to health when properly used.

A person supplying telehandlers, including sellers and hirers/lessors, must ensure that they are capable of safely using the attachments intended for their use, and must only be supplied with attachments that can be safely used with the machine and are compatible with it. Where a telehandler is required to lift a freely suspended load, it must comply with AS 1418.5, including meeting the stability requirements specified by that standard, being fitted with the necessary operator safety devices, such as indicators and limiters, and being provided with the necessary load charts. In addition, the limitations of the machine, including the maximum operational slope, must be provided. This obligation extends to persons importing telehandlers into NSW whether for their own use or for supply to others.

Owners of telehandlers and those responsible for their use should immediately ensure that they have all the information that apply to them, including their maximum operational slope and other limitations. They should determine whether their machines have been designed to accommodate the attachments that are intended to be used. Where it is intended to lift freely suspended loads, steps must be taken to ensure that the telehandler can be safely used for that operation and, in particular, that it complies with AS 1418.5. Before carrying out any operation using a telehandler, its suitability for the task must be assessed.

FURTHER INFORMATION AND ADVICE:

Further information on telehandlers is provided in the WorkCover Position Paper *Design of plant that can be used for multiple purposes* at http://www.workcover.nsw.gov.au/NR/rdonlyres/1996549D-B651-46AC-94E3-034830ED02AC/0/design_of_plant_for_multiple_purposes_4401.pdf.

A WorkCover officer visiting a workplace where a telehandler is in use may seek confirmation that the machine has been designed for the operation being undertaken. If the WorkCover officer forms an opinion that persons are being exposed to risk from the telehandler, the officer may take appropriate action.

For further information about this matter please contact WorkCover's Information Centre on 13 10 50

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