



S A F E T Y B U L L E T I N

USE OF PROPRIETARY AIR HOISTS FOR TRANSPORTATION OF PERSONNEL IN UNDERGROUND MINES

Preliminary

Proprietary air hoists have been used by the mining industry for lifting and lowering persons in underground mines for more than 25 years. This usage has taken place with the knowledge of manufacturers and suppliers of this equipment despite the existence of small-print footnotes, in their published brochures, stating “not to be used for lifting or lowering people”. Over this period some of these units have been approved for use by regulatory authorities across Australia with appropriate precautions and limitations. There have been serious incidents involving some of these hoists and when those occurred, close liaison with the local suppliers resulted in modifications which have led to improved safety of operation of the relevant hoists.

Recently one supplier of air hoists has advised the Department that their air hoists, which in some cases have been in use for more than 25 years, are **not** held by them to be safe for lifting or lowering of people and have now highlighted the existence of the advisory footnotes in their brochures and other similar publications.

The introduction of the broad obligations of the general duty of care to most of the occupational health and safety legislation in Australia, not only for employers and employees, but also for manufacturers, suppliers and importers, has brought all plant under closer scrutiny. The use of such plant is reviewed in the light of practicability giving regard to :-

- (a) the severity of any potential injury or harm to health than may be involved and the degree of risk of such injury or harm occurring; and
- (b) the state of knowledge about :-
 - (i) the injury or harm to health referred to in (a) above; and
 - (ii) the risk of that injury or harm to health occurring; and
 - (iii) means of removing or mitigating the potential injury or harm to health;and
- (a) the availability, suitability and cost of the means referred to in (b)(iii) above

and this new approach to reviewing plant may have prompted the one supplier to highlight the restrictions to the use of their hoists. Overseas product-liability legislation may also have had an effect in prompting the critical review by international manufacturers of the conditions of use of some products.

Further to the unequivocal restrictions placed on the “older” air hoists, one manufacturer has released a series of air hoists called “Man Rider Air Winches” and has suggested that these “winches” may be used for “personnel lifting”. However, according to the brochures issued with these “winches”, the lifting of personnel is “**STRICTLY LIMITED** to offshore marine applications specifically approved by maritime regulatory bodies”. The “Man Riders” are stated to be only intended for use in unguided systems and where the “winch operator” **must** be in a position to **always** see the personnel from transfer point to landing area”. Clearly these restrictions render the “Man Riders” unsuitable for all underground mine shaft applications.

Proposed Action

In view of the limitations being clearly and formally stated by the suppliers of air hoists, it is considered unwise to continue to use them for personnel transport.

The air hoists will have to be replaced by purpose-built units which are designed for safe transportation of personnel. It is recognised that there will need to be a reasonable transition period before all the relevant air hoists can be replaced by purpose-built units, however steps should be taken, as a priority, to proceed with positive action to implement the change-over.

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