

Technical Bulletin

No. MISC004AU
Release Date: 08/2007

Subject: A Summary of changes to the AS/NZS 1891.1:2007 Standard

AS/NZS 1891.1 is the manufacturing standard for personal fall arrest equipment. This standard has recently been reviewed and revised. The purpose of this bulletin is to summarise the changes made and their impact for equipment users.

Removal of Restraint

The removal of restraint ratings for equipment from this standard is not meant to stop workers from working in restraint, the change is meant to reinforce the point that users should wherever possible work in restraint, but can only use equipment rated for fall arrest. This avoids the potential intentional or unintentional risk that people use restraint rated attachment points in a location where there is a risk of a fall arrest.

As a consequence, the use of simple lanyards (lanyards or restraint lines) without energy absorbing systems will no longer be approved for use in restraint.

Body belts

Body belts such as miner's belts, linesmen's belts & rigging belts having been removed from the standard will not be supplied with a certification mark. People in these occupations that require a conformance mark will have to use a full body harness in place of a body belt for work in restraint.

Lower body harness

The lower body harness (or sit harness as it is commonly known) is a harness with no shoulder straps. These products typically have pole strap side attachments and a frontal limited fall arrest attachment point. This harness is still officially approved for use, though is under review and may through an amendment be removed from the standard at the end of 12 months.

Fall arrest rated harnesses

These harnesses may have attachment points capable of providing various connection points including:

- a) Front upper central fall arrest rated attachment (mandatory)
- b) Rear upper body (dorsal) fall arrest rated attachment (not mandatory)
- c) Limited free fall (front waist) attachment
- d) Pole strap (Side "D's" on waist) attachment
- e) Retrieval (Confined space / rescue) attachments

The use of sewn fall arrest loops fitted to the shoulder straps and joined together by the user to form a fall arrest attachment point are considered by the standard to comply. The attachments are to be marked for the determined use accordingly.

One key change is that the frontal fall arrest attachment on all full body harnesses is now mandatory and will mean that all future full body harnesses sold will be required to have this

attachment. It does not mean that users of fall arrest harnesses will have to use this attachment exclusively, it simply means that the harnesses must have one in position/available. There is a phase in period of 12 months for this requirement for manufacturers.

A rear (dorsal) fall arrest attachment point is not mandatory. Where a rear "D" is offered however, the user may select either the front or rear "D" as a connection point, the determination of which must be made as part of the risk assessment. Care should be taken when using front fall arrest attachment which requires a higher level of training.

Fall arrest harnesses presently in use

Harnesses which are in use or have been purchased without the new mandatory front fall arrest attachment may continue to be used until they are deemed unsuitable for further use following inspection. The standard does not require the removal of these harnesses.

Attachment points on a harness marked specifically for restraint including rear waist restraint attachments should not be used. The use of the restraint "D's" needs to be restricted to pole strap use, where the harness has two side "D" rings normally marked for restraint and pole strap.

Lanyards

Twin tailed lanyards are now required to pass a static pull test between both tails to exceed 15kN. Capital Safety achieves the performance requirements of this test on all twin lanyards through the use of a metal ring at the join of the two ends, to ensure that in the event of misuse, the twin tails cannot be separated.

The standard requires that a suitable means of stowage for the unused tail shall be provided. Capital Safety supplies such an accessory with all twin tail lanyards now sold. These are manufactured using Velcro and are marked "lanyard stowage point" for retro-fitting to the harness and are clearly marked "Not for fall arrest". The attachment point is not able to sustain a fall force and will stop the possible short circuit of the twin tail if one of the tails is retained on the harness.

Aside from being available for some time, adjustable lanyards are now specifically listed in the standard. These may incorporate a length adjusting device enabling a 2 metre lanyard to be reduced in length when required.

Hardware

Attachment hardware such as hooks and karabiners are required to meet a higher standard than before, requiring increased static strength in longitude as well as front and side gate load resistance.

The hook or karabiner shall meet ISO 10333-5 as referred to in AS/NZS1891.1 and shown below:

- Static strength a minimum of 20kN (*The previous strength requirement was 15kN*)
- Gate (face) – must withstand a static load of 1kN
- Gate (side load) – must withstand a static load of 1.5kN

The Capital Safety product range largely meets all new requirements of the standard, however the current product range will be rationalised progressively over the next few months to ensure all products fully comply with the standard.

For more information about the changes in the standard, refer directly to AS/NZS1891.1:2007, or contact Capital Safety on 1800 245 002 (Australia) or 0800 212 505 (New Zealand).