

Orchard picking platform standards

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Orchard picking platform standards

- **Horticulture Australian Limited (HAL) sponsored a cross-industry project to negotiate standards for orchard picking platforms starting late 2005**
- **New Zealand joined with Australia to add more weight to the task**

Orchard picking platform standards

Progress to date:

The operating standard AS 2550.10 has been published-

- **Improvements to maintenance requirements**
- **Rules for fall-arrest systems**

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Design standard AS 1418.10 to be published 2009

- **A separate section on Orchard platforms**
- **A commentary section - the only published authority on orchard platforms**

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- **The international platform standards do not recognize orchard platforms and could be used to discredit a lone Australian/NZ standard in an OH&S prosecution or civil action.**

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- **In time we expect ISO 16368 to supersede AS 1418.10 which would leave orchard platforms unrepresented**

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A separate Orchard platform standard –

We had to convince the Australian and International standards committees that orchard platforms are different.

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These electricity platforms are relatively sedentary once positioned. Controls are designed to prevent inadvertent movement – crush risk

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In contrast an avocado picker may pick 14 thousand pieces of fruit in a shift moving the platform some 4 thousand times. These controls are designed hands free so the operator can pick with both hands.

The crush risk is less significant



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Other areas where orchard platform priorities differ from those of industrial application are set out in the standards and commentary attached to my paper:

- **Travel speed – orchard platforms are smaller and need to travel faster**
- **Platform guard rails design to clear plant debris**
- **Simultaneous use of controls**
- **Enhanced stability requirements**

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An issue for Manufacturers

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Lowering the platform can not reset the simple slope switches currently used

A programmable slope switch will need to be developed to increase its switching angle as the platform is lowered.

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AS 1418.10 draft - no gates through the guard rail

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Risk of overturning

- **Orchard platforms have been known to overturn when operating up and down a slope and then turn side on across the slope where they are less stable**

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- **Fundamental issue – some platforms lack stability**

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Orchards can be planted on serious slopes – 15 degrees here

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Single castor three wheelers are nimble and efficient for relatively flat areas– rated 5 to 7 degrees maximum

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Adding a walking beam 4-wheel drive to the single castor improves stability

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More stable again– dual castors added to the walking beam make a larger footprint



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Add tracks for greater traction and stability

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Growers can remain part of the agreement by continuing an active involvement in developing standards ?

