

Dumpmaster Bin-Tippers – how to meet AS/NZ 4024

Considerations of the Safetymaster™ Process. NOTE: AS4024 can be complied with in a number of ways, some more complicated, some less. It all depends on the findings of a *Site Specific* risk assessment. The below illustration shows *one way* that compliance could be achieved in a high risk site. In some situations equipment may still need independent validation *on each site* as per AS/NZ 4024. 1502: Design of safety related parts of control systems—Validation

Certified lifting point or fork pocket.

Hood and Chute

Custom built guard to suit application to prevent crushing between the bin and the receiving vessel.

AS/NZS 4024.1803:2014 Safety distances and safety gaps – Minimum gaps to prevent crushing of parts of the human body.

Full guarding to 2400mm as per

AS/NZS 4024.1801:2014 Safety Distances to prevent danger zones being reached by upper and lower limb.

Tipper in position sensor:

To ensure that the machine is only used in a safe position – eg, up against the skip, as per:

AS/NZS 4024.1601: 2014 Design of controls, interlocks and guarding – Guards- General requirements for the design and construction of fixed and movable guards.

Stabi-Loc guard and lock system

One single footpedal action easily raises and lowers the guard ensuring that in the lowered position the clearance around the base of the machine is no more than 20mm in accordance with AS/NZS 4024 requirements. With the Stabi-Loc released, the clearance is 40mm around all but the 4 feet pads meaning that the Dumpmaster can traverse uneven ground easier.

CATEGORY 3 (To achieve PLd Simpro Uses CAT3)

AS/NZS 4024.1503: 2014 Safety-related parts of control systems – General principles for design. Reference section 4.5.4

Lift Up – Door with Locking Electrical Interlock (RFID sensing) as per

AS/NZS 4024.1602:2014 Section 7 – Design to minimise defeat possibilities of interlocking devices.

Lift-up door. Gas strut assisted lift up door to minimise space required in a back-of-house or dock area. 25x25mm mesh and $\geq 120^{SR}$ as per:

AS/NZS 4024.1801:2014 Safety Distances to prevent danger zones being reached by upper and lower limb. Table 4

Vision slots - 8mm slots and $\geq 80^{SR}$ as per:

AS/NZS 4024.1801:2014 Safety Distances to prevent danger zones being reached by upper and lower limb. Table 4

E-Stop as per

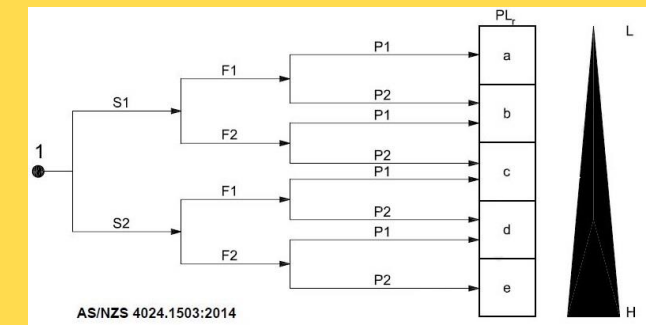
AS/NZS 4024.1604:2014 Design of controls, interlocks and guarding –Emergency Stop- Principles for design. Section 4.1.4

Manual Reset as per AS 4024.1503—2014

AS/NZS 4024.1503: 2014 Safety-related parts of control systems – General principles for design section 5.2.2

Performance Level d (PLd)

(Assuming S2, F2 and P1 which can only be confirmed by a site specific Risk Assessment conducted in accordance with AS/NZ 4024.1303: 2014 Risk Assessment)



AS/NZS 4024.1503: 2014 Safety-related parts of control systems – General principles for design. Annex A Determination of required performance level (PL.)