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At Marshalls' Sandy Lane concrete facilities the waste such as rejected concrete blocks, unused concrete and aggregates is taken to holding bays for reprocessing. The waste products are placed in skips and transported around the site by forklift trucks.

The original waste skips used on the site were hinged. This allowed the body of the skip to tip forwards discharging the contents of the skip into the waste bay. The driver would raise the skip on its forks and then pull a release handle allowing the skip to tip under gravity. Once the waste had been released, the driver would exit the cab and pull the skip back to the level, engaging the release handle which prevents the skip body from tipping.

The tipping body skip presented numerous hazards:

- Slips and trips when exiting forklift truck to activate the release handle.
- Slips and trips walking over the waste in the waste bay
- Strains from the manual effort required to activate the release handle under load
- Exposure to the airborne dust from the discharged waste
- Driver exposed to elevated load when re-setting the skip onto the level
- Potential manual handling, crushing and impact injuries from the moving body of the skip

The Marshalls' Sandy Works team engaged with a local fabrication firm, P. H. Engineering Services Ltd, to find a better solution for the waste handling. They designed a square bodied, robust skip that employed a strong hinge at its base. The hinge allowed the whole base surface of the skip to rotate, effectively creating a door to release the waste products.

The skip is transported by picking it up with a forklift truck from the base. When in the area where the contents are to be discharged, the forklift truck places the skip on the ground,

withdraws the forks from the base and then aligns the forks with two lifting points at the top of the skip. The forks are then raised lifting the skip upwards and allowing the hinged base of the skip to open discharging the contents. The driver then lowers the skip whilst gradually reversing, allowing the base to close. The skip is then picked up from the base for transporting back to the production facility.

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- The skip can accept all granular and block wastes.
- Forklift driver remains in cab – reduced risk of slips trips and falls
- Reduced exposure to dust
- Reduced risk manual handling injuries and crush injuries
- Bottom opening skips can be made to suite the capacity of the forklift trucks
- Modular design that can be integrated across the business.

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