

Procurement of two (2) forklifts for New Pier State warehouse in Durban

The following items and parameters need to be considered when deciding upon the appropriate model of forklift to implement within the Warehouse.

Main Aisle:

The main thoroughfare aisle that runs past the Administration block and grants access to all subdivided enclosures is 4000mm wide. While the standard aisle width of 4650mm accounts for two loaded units travelling in both directions, if the traffic within the warehouse can be assumed to be as light as anticipated, a stop/go system of travel from either end of the aisle should be sufficient to allow safe operation of multiple units operating in the space.

Racking Spacing:

Due to the standard dimensions of a forklift however, the 4650mm width does need to be adhered to when planning the positions of the racks within the enclosures. This is meant to account for all movement necessary for the unit to perform its duties including pivoting into position to load and unload shelving and making turns to navigate through the racks without damaging the structures.

Opening Dimensions:

Gates and openings that will have an impact on the movement of the units are listed below:

- Swing and sliding gates opening size: 3000mm wide.
- Gates with overhead trunking for technical security: 3000mm wide x 3000mm high.
- Service and Maintenance Bay roller shutter doors: 2980mm wide x 2010mm high to underside door 'T' slat.
- Destruction of Goods Bay roller shutter door: 2650mm wide x 2370mm high to underside door 'T' slat.
- Hazardous Chemical Storage roller shutter door: 3030mm x 2400mm high to underside 'T' slat.

These openings are already constructed and need to be considered against the dimensions of the units chosen.

Ventilation:

The current proposed area to be utilized as a charging station for the battery powered units is not within a closely enclosed area but is open within the warehouse itself. Therefore this positioning must be noted by the supplier and determined by them as sufficient or requiring additional measures to safely accommodate all equipment and items necessary to carry out the functions of a charging station.

#### Floor Surfacing:

The current epoxy finishes carry a 25MPa rating while the forklifts range in unloaded weight between 7 & 8 tons, and a fully loaded weight of 10 & 13 tons (depending on the model). The supplier will need to consider this rating and whether the weight of their units will cause any unreasonable wear and damage to the newly installed surface.