

GUARDED PALLET LIFT

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PLM/100004/1410/B/G

GUARDED PALLET LIFT DESCRIPTION

This guarded pallet lift is a double pillar machine with a Safe Working Load of 1000 Kgs and a lift height of 1410mm. The lifting platform will be big enough to allow a standard pallet (1200 x 1000mm) to be loaded using a hand pallet truck. At the upper level, the pallet was unloaded by hand by removing each individual sack. The guarded pallet lift was constructed from Grade 304 stainless steel and would be bolted to the floor. Lifting with this guarded pallet lift is accomplished via chains driven by a motor gearbox mounted at the top of the one column with a crossover shaft to the other column.



Double Pillar Guarded Pallet Lift for Standard Pallets

SAFETY GUARD TO PD 5304:2005 SAFETY OF MACHINERY

The safety guard is constructed from 40 x 40 x 3mm stainless steel box section and 2mm stainless steel sheet to meet the requirements of PD 5304:2005 Safety of Machinery. It would enclose the guarded pallet lift to a height of 3400mm with a hinged door at each level through which the machine can be loaded and unloaded. Each door is electrically interlocked to prevent the guarded pallet lift being operated with a door open and in addition, the doors are mechanically locked closed whilst the machine is running. Each door may only be opened when the lifting carriage is at the appropriate level.

GUARDED PALLET LIFT SPECIFICATION

DESCRIPTION	DOUBLE PILLAR GUARDED PALLET LIFT
MODEL No.	PLM/1000/1410/B/G
CAPACITY	1000Kgs
LIFT HEIGHT	1410mm
OVERALL HEIGHT	3500mm
MACHINE HANDING	LEFT OR RIGHT HAND AVAILABLE
PLATFORM SIZE	1300 x 1200mm
CONTAINER DESCRIPTION	STANDARD PALLET 1200 x 1000mm
BASE ARRANGEMENT	BOLTED TO THE FLOOR
CONTROL CIRCUIT	24Vac (STANDARD)
ELECTRICAL RATING	IP65
LIMIT SWITCHES	ADJUSTABLE ROD
MOTOR DETAIL	2.2kW, 3 PHASE, 50 CYCLE, 415V
MOTOR BRAKE	415V SEPARATELY EXCITED
GEARBOX DETAIL	FLENDER
LIFT CHAIN	1" SIMPLEX SEDIS DELTA 'Z'
TENSION CHAIN	3/4" SIMPLEX SEDIS DELTA 'Z'
LIFT SPEED	6.4 METERS/MINUTE

GUARDED PALLET LIFT APPLICATION STORY

This guarded pallet lift was required to elevate a standard pallet (1200 x 1000mm) from a ground floor level up to a mezzanine floor at a height of 1410mm. This guarded pallet lift had a 'Z' loading configuration so that the pallet was loaded at the front and unloaded at the back of the machine at the upper level. This guarded pallet lift can be mounted on an existing floor and therefore does not require a pit to be created with the requisite drainage issues.

The pallet being raised was filled with sacks of ingredients that were being loaded into cooking vessels. The mezzanine floor was too confined to allow the whole pallet to be removed from the guarded pallet lift so individual pallets were removed by hand. To assist this, the pallet was raised until the top level of sacks were at a suitable ergonomic height for removal. Once the first layer had been removed, the pallet lift could be inched up under 'dead man's handle' control to remove subsequent layers until the whole pallet was unloaded.

