MAX THE CUBE

inspiring solutions from **thistle systems**

RADIO SHUTTLE

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MAX THE CUBE WITH RADIO SHUTTLE RACKING

Being able to utilise the entire volume of a warehouse while having efficient and economical pallet management is an equation which doesn't usually add up.

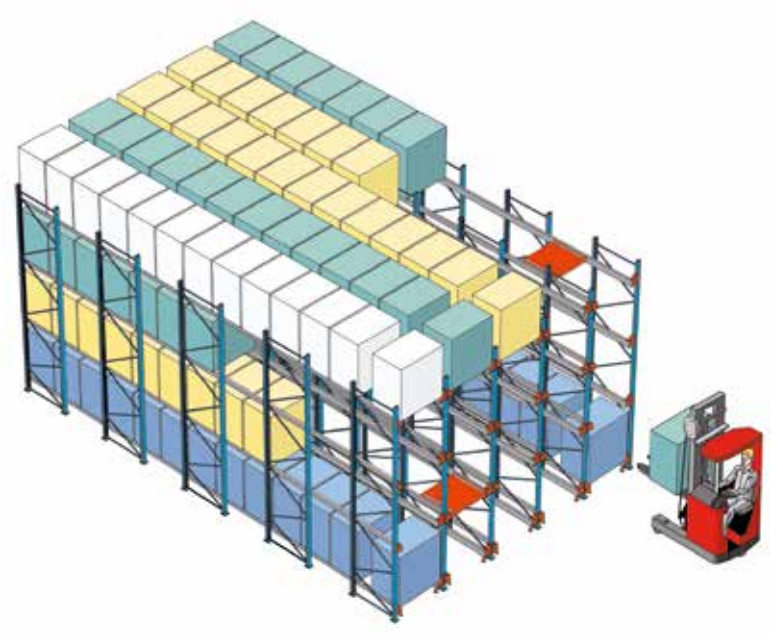
Max the Cube Radio Shuttle is a patented robot for handling pallets in a high density racking system.

Unlike other high density racking solutions, where it is necessary to drive into the rack with the truck, our Max the Cube Radio Shuttle can collect or stack the pallet - all at the touch of a button.

This not only saves time and money when loading and unloading the racking, but can also dramatically increase capacity within a very small foot print

Less damage – better economy
Letting our Max the Cube Radio Shuttle take care of all pallet handling in the rack means the amount of damage of both goods and racking is kept to a minimum.

Thia can dramatically reduce your annual rack repair bill and the lifetime costs of the system.

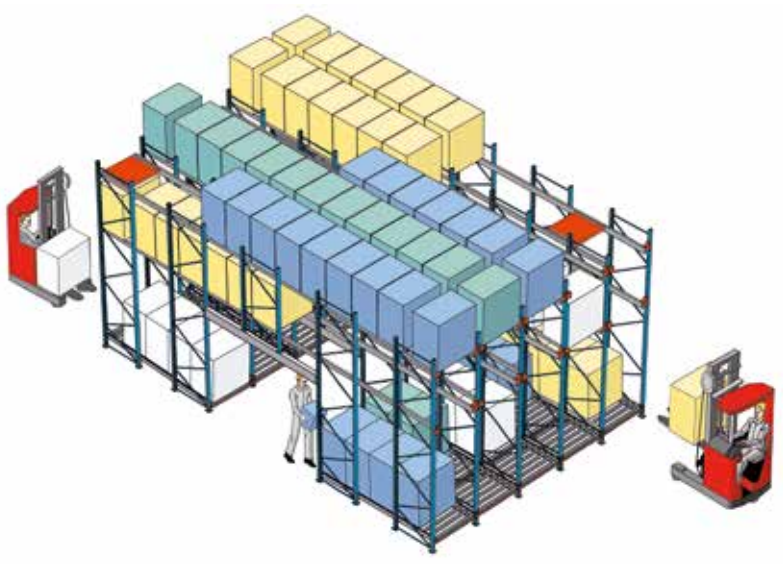


FILO handling

All pallet management by truck takes place in the main aisle. This means that the rack can be made much deeper than an ordinary high density racking. Furthermore, as the radio shuttle works independently of the FLT, the truck doesn't need to stand and wait for the Max the Cube Radio Shuttle and is free to work elsewhere.

This delivers a high rate of turnover whilst reducing the truck's handling time by as much as 50%.

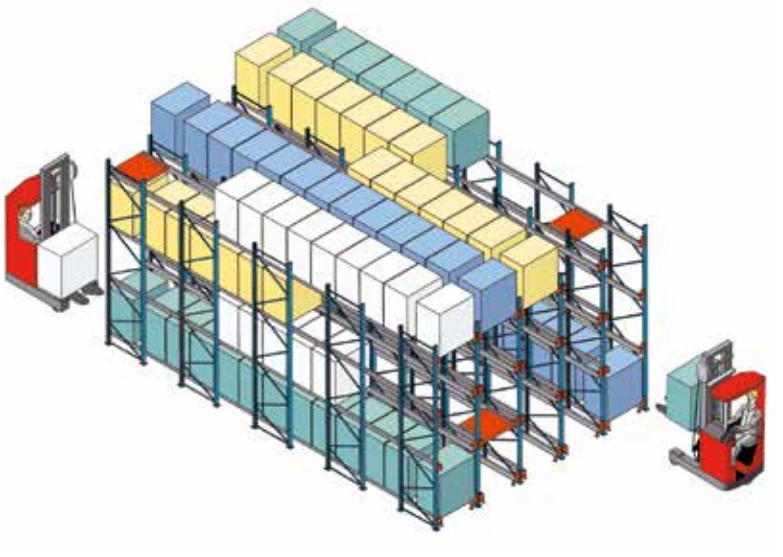
As the Radio Shuttle works on lanes, the goods only need to be uniform within one lane of the racking. This means a high rate of capacity utilisation and a high rate of accessibility of the goods.



Picking

Here the Max the Cube Radio Shuttle is used together with roller conveyors. A combination where there is room for buffer pallets at the upper levels and for roller conveyors at the lowest level. All picking from pallets takes place from a picking corridor that passes through the rack.

The buffer pallets are handled by trucks and the Max the Cube Radio Shuttle in a separate truck corridor – an efficient and spacesaving way of storing buffer pallets in the immediate vicinity of picking, and at the same time achieving a safe work place with separate truck corridors.



FIFO handling

Here the Max the Cube Radio Shuttle is used in a throughput storage and the pallets are managed after the principle first in – first out.

The Max the Cube Radio Shuttle can also carry out a reorganisation of the pallets and when required move all pallets closer to the unloading point.

Robust chassis in powder painted steel. Designed for warehouse environments.

The Max the Cube Radio Shuttle is powered by rechargeable batteries which have a long operating time. The charging procedure is simple as the batteries are located in easily accessible cassettes.

Fork positions on the side of a "belly" providing security while handling the shuttle.

The design of the lifting unit combined with large wheel in vulcolan allows the system to handle pallets of a weight up to 1500 kg.

Laser sensors to the front and rear to enhance safety by detecting items in its path

Radio transmitter

The Max the Cube Radio Shuttle works without cables and is controlled using a radio transmitter via the truck. The display shows which machine is being controlled.

Charging station

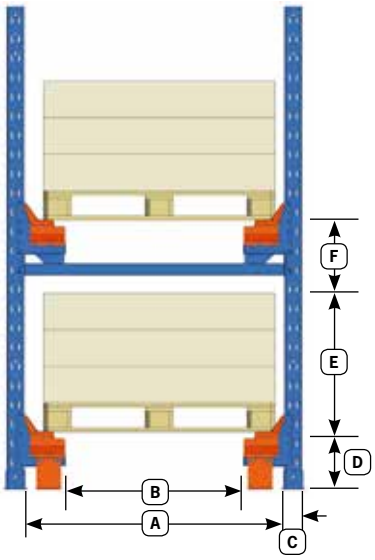
Each charging station provides space for 2 set of batteries. Drawers connected direct to chargers. In the front of the chargers is a display with battery status.

Remote control

The Max the Cube Radio Shuttle works via remote control and is controlled using a radio transmitter via the truck driver. Photocells guarantee that it always goes to the correct position in the channel. One or more of the Max the Cube Radio Shuttles can be controlled by the very same radio transmitter.

Combi

Max the Cube Radio Shuttle is also available as a combi where it is possible to handle two different dimensions of pallets, e.g. pallet measurements 800x1200 and 1000x1200 mm. The machine knows, of course, which size pallet is to be collected or dropped off.



TECHNICAL DATA	RACKING
A Section dimensions mm	1350,1400,1450,1500
B Free dimension between rails mm	922
C Upright mm	90, 110
D Lowest level above floor mm	300
E Pallet height	
F Minimum distance between goods and pallet mm	300

TECHNICAL DATA	CHARGING STATION
Height mm	1100
Depth mm	475
Width mm	605
Weight (excl. battery) kg	74
Power supply V/A	230/10

TECHNICAL DATA	MAX THE CUBE RADIO SHUTTLE	
	RS96-1t	**RS96-1.5t**
Motor	Electric, battery	Electric, battery
Capacity kg	1000	1500
Transport speed with load m/s	0.65	0.65
Transport speed without load m/s	0.95	0.65
Drive motor kW	0.16	0.16
Lift motor kW	0.16	0.16
Battery type	gele-acid lead batteries	gele-acid lead batteries
Capacity V/Ah	24/50	24/50
Charging time h	<8	<8
Weight kg	2x24	2x24
Charger		
Power supply V/A	230/10	230/10
Radio transmitter		
Frequency MHz	433	433
Power supply V/A	12-24 DC/100	12-24 DC/100
Weight without batteries		
Pallet size 1200 x 800	170 kg	170 kg
Pallet size 1200 x 1000	180 kg	180 kg
Pallet size 1200 x 1000/800	180 kg	180 kg

Facts

Safety requirements
The Max the Cube Radio shuttle is designed and manufactured to the most stringent safety standards.

As the racking and radio shuttle is purposely designed and manufactured to work in harmony with each other, you can be assured of a high quality system which is designed to perform and built to last.

Delivery
All Max the Cube Radio Shuttle installations are planned and CAD designed by our project department. When it comes to assembly we recommend that our skilled fitters carry out the job.

Freezer
The Max the Cube Radio Shuttle is suitable for freezer environments.

Warehouse equipment: Pallet racking, Drive-in racking, Max the Cube Radio Shuttle, Live storage racking, Drawer unit, Cantilever racking, Timber racking, Vertical racking, Modular shelving, Barrier system and Plastic bins.

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