

Horizontal Carousel

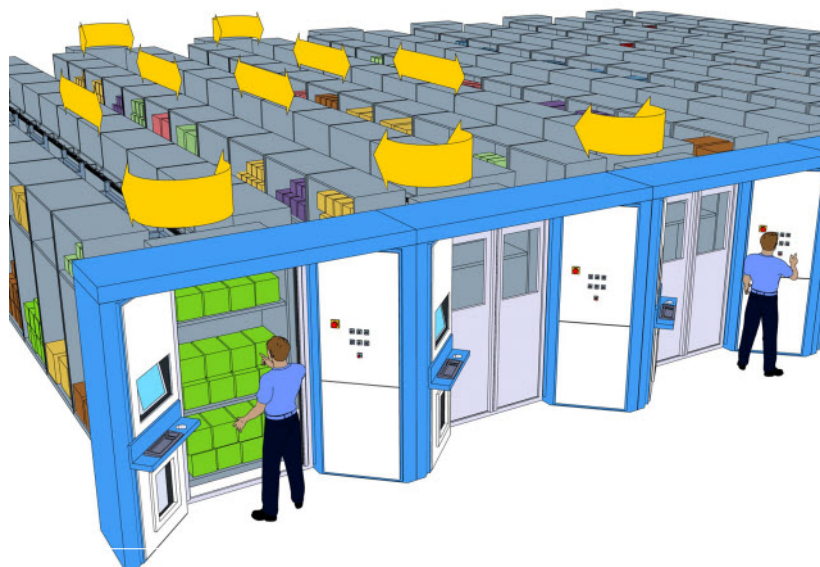


Designed and manufactured in the UK.

Bays of shelving are connected to transport chains that rotate the entire complement of bays around inside a protective enclosure in either direction working on the shortest routing principle.

Expensive support structures are eliminated as the machine runs directly on the floor, steel plates are fitted under the running wheels if the floor is uneven or pitted or the carousel is installed on a mezzanine floor to spread the load and to achieve smooth and quiet running.

Ideal for use in low headroom or where the products are too bulky for vertical systems, products in bulk or for fast retrieval requirements.



Drive mechanism

Horizontals are installed on mezzanines with a load capacity of 4.8 kn. M²/ 100lbs per ft². Even with full loads the superimposed weight is less than the designed capacity of the floor.



Installation with a Horizontal Carousel on a mezzanine floor with two Vertical Carousels installed through the floor.

The bays are presented at the access port in front of the operator allowing picking from the whole height, width and depth of the bay, it is possible to have access to more than one bay in the access port if picking is from the side.

Single access ports can be positioned virtually anywhere around the machine, at the ends or along the sides.

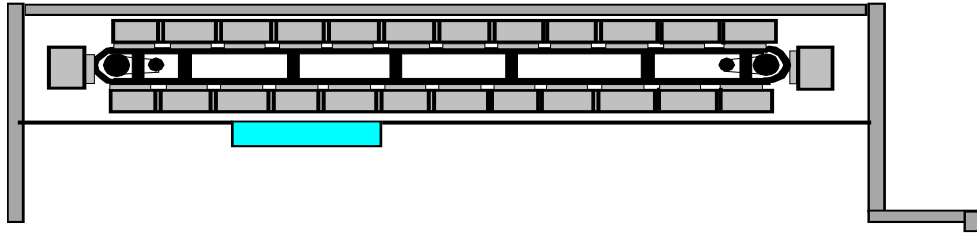
Multiple access ports are possible on the same or opposing sides or at the opposite ends of the machine for replenishment purposes.

The access port is fitted with automatic doors that close when the machine is running and open when the requested bay is presented at the port, a full height photoelectric curtain is also installed for additional protection.



A numeric digit bay selector keypad with options for alpha numeric keypad or PC in stand alone or network linked provides control of the Horizontal.

The machines can be manufactured to fit into a given space or area allowing the user maximum benefit of available floor space, or between columns etc.



The carousel bays can be made to a required size in their width from 500mm to 1500mm, in height from 1500mm to 3000mm and depth from 300mm to 1200mm.

Shelving Bays are manufactured from galvanised sheet steel for fully enclosed secure bays, solid steel shelves are adjusted on a 25mm increment vertically and can be fitted with adjustable dividers to give product segregation or stop product migration along the shelf, bin fronts are also available.

Bay loads of 250, 350 & 500Kg as standard, 750Kg and 1000Kg are also available. Shelf loads of either 50Kg, 100Kg, 150Kg or 200Kg.

All Horizontal carousels are fitted with twin drive motors above 10 bays long, this provides smooth operation and allows the machine to be run should one fail, it also ensures a longer life and less breakdown possibilities.

Accurate stopping and positioning is achieved using a shaft encoder or sensors. Load balancing is not an issue for the Horizontal.

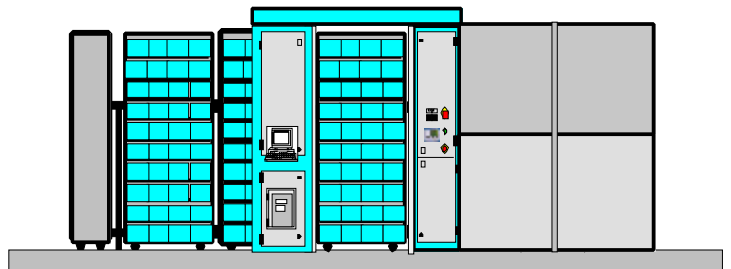
Picking rates can be fast if a batch pick procedure is employed or in a " Picking Cell " arrangement. Batching 6 orders together with an average of 5 line items in each will enable one operator to pick approximately one line every 30 seconds in a 30 bay unit.

If more than one carousel is used then the same operator can increase picks to one every 15 seconds or better.

3 machine picking cell layout



Picking port at the side of the carousel



Pick & Place_by_Light systems and integration to conveyors can be provided to improve pick rates.