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> Dynamic Storage System: “TowerMat” for the storage of bar stock, crates, pallets, sheet metal



TowerMat: Saves space and lowers operating costs

> INTERTEX offers customized solutions for the storage of almost any product. For instance, our machines perfectly store pipes, long profiles, sheet metal and even wire baskets or palletized loads. TowerMat is the ideal solution when it comes to saving space and increasing productivity and these benefits can be realized in the warehouse or on the production floor. Using the full ceiling height of your facility and eliminating handling equipment aisles, the TowerMat yields the smallest footprint possible.

Load/Unload Stations

The TowerMat maximizes flexibility in handling by allowing loading/unloading from the front, or from the side (moving product out lengthwise) or any combination of load/unload stations. Note the Storage and Retrieval Unit (SRU) deposits the tray onto a dolly. This dolly then moves on the floor parallel to (sidewise) or perpendicular to (out the front or back) the stored loads.

Control

The control developed by INTERTEX (INT-MP) is capable of fully automated storage and retrieval of products by means of article or bin numbers as well as bar code. The INT-MP Control can be easily configured to interface with your existing inventory control software.

S/R Unit (SRU)

In this dynamic storage system the S/R unit automatically seeks the shelf location. It brings the products, which are stored in trays, to the Load/Unload Station and afterwards returns the tray.



Capacity: 38 cassettes / L 6,500 mm, D 600 mm, H 180 mm
 Max. load per cassette: 2,000 kg / Max. load TowerMat: 76,000 kg
 Machine Dimensions: H 6,500 mm, W 7,300 mm, D 2,600 mm



Capacity: 28 cassettes / L 6,150 mm, D 600 mm, H 400 mm
 Max. load per cassette: 3,000 kg / Max. load TowerMat: 84,000 kg
 Machine Dimensions: H 5,800 mm, W 6,950 mm, D 2,600 mm



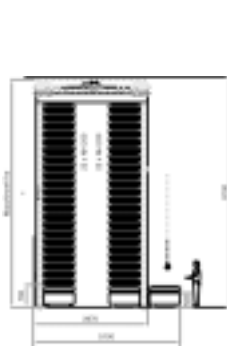
Capacity: 50 cassettes / L 6,500 mm, D 800 mm, H 280 mm
 Max. load per cassette: 3,000 kg / Max. load TowerMat: 150,000 kg
 Machine Dimensions: H 10,000 mm, W 7,300 mm, D 3,500 mm



Capacity: 27 cassettes / L 6,200 mm, D 800 mm, H 300 mm
 Max. load per cassette: 3,000 kg / Max. load TowerMat: 81,000 kg
 Machine Dimensions: H 6,750 mm, W 7,000 mm, D 3,500 mm

The TowerMat Model: “LLT” for light- and medium-weight storage requirements

➤ The TowerMat Model “LLT” offers great advantages in handling and access time compared to static shelf systems. The product is automatically brought to the production worker and is ergonomically positioned. The product can now be handled, quite often its ready for the saw. In the standard version, workloads of up to 3,000 kg (6,600 lb) per tray are the norm, but greater loads are handled easily. The standard widths are up to 6,500 mm (21 feet), but trays with widths up to 14,000 mm (46 feet) are possible. The intelligent control system recognizes different tray heights and stores them accordingly.



LLT



LLT Pit Version

Crane Mount

A bridge or gantry crane can also be mounted to the TowerMat.

Transfer Cart

The S/R unit (SRU) moves vertically between the two storage columns. An extractor unit on the SRU takes over the actual transport of the tray from the storage columns on to the SRU and from there to the transfer table and/or cart.

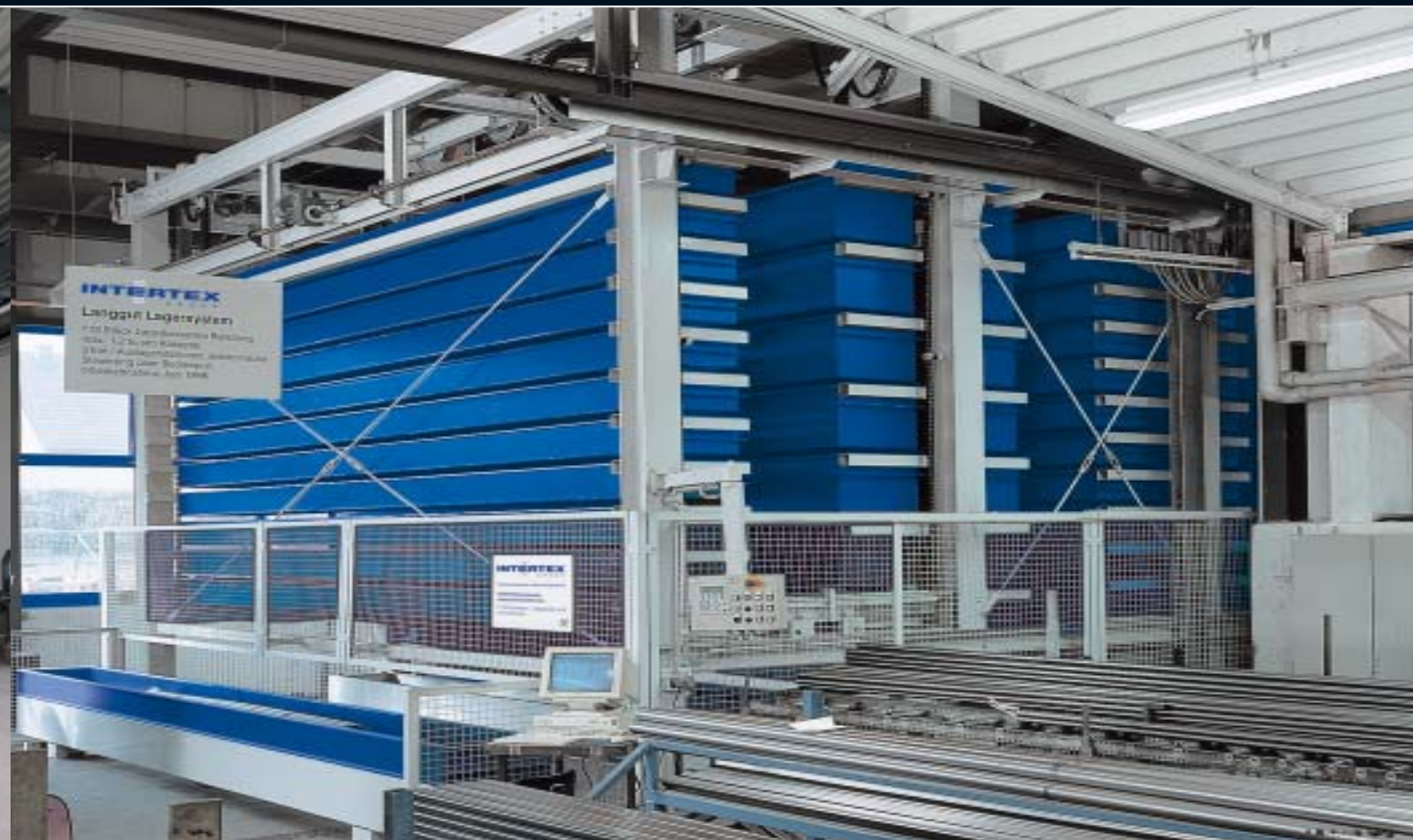
Pit Version

To obtain additional storage capacity it is possible to increase the headroom through the use of a pit.





Capacity: 156 cassettes / L 6,500 mm, D 600 mm, H 350 mm
 Max. load per cassette: 3,000 kg / Max. load TowerMat: 468,000 kg
 Machine Dimensions: H 7,800 mm, W 7,400 mm, D 12,200 mm



Capacity: 113 cassettes / L 6,100 mm, D 500 mm, H 200 / 400 mm
 Max. load per cassette: 1,200 kg / Max. load TowerMat: 135,600 kg
 Machine Dimensions: H 6,150 mm, W 7,000 mm, D 10,800 mm

The TowerMat Model: “ASLL” for medium- to heavy-weight storage requirements grows with your future needs

➤ Due to its modular construction, the top transferred tray design of the “ASLL” model allows for later growth in the depth of the system. This way the TowerMat, unlike other custom AS/RS systems, can meet current needs and later adapt as your company grows. In this system, a mobile unit “sits” on top of the columns and the SRU dives in from above between the storage columns and moves the targeted tray onto the SRU, which then proceeds above the columns to the picking stations.



ASLL

Workloads

The workloads and widths of the trays are the same as those of the type “LLT”. There are virtually no limits on gross payload due to the ability to simply add to the depth of the system. In this machine, the trays are stored and retrieved from either the front or lengthwise. The number of storage columns (or Towers) may also allow for the realization of several S/R stations from the side (lengthwise).

Loading

The transfer cart is fitted with a pick-up/drop station for loading with the forklift. The S/R stations can be retrofitted with processing or order picking systems that can be loaded either way.





Capacity: 24 cassettes
L 2,600 mm, D 1,350 mm, H 150 / for middle format sheets
Max. load per cassette: 3,000 kg / Max. load TowerMat: 72,000 kg
Machine Dimensions: H 6,900 mm, W 3,400 mm, D 2,900 mm



Capacity: 39 cassettes / L 3,100 mm, D 1,600 mm, H 250 / for big sheets
Max. load per cassette: 2,000 kg / Max. load TowerMat: 78,000 kg
Machine Dimensions: H 5,400 mm, W 10,000 mm, D 3,400 mm



Capacity: 93 cassettes / L 3,100 mm, D 1,600 mm, H 90 / 120 / 150 mm
Max. load per cassette: 3,000 kg / Max. load TowerMat: 279,000 kg
Machine Dimensions: H 11,200 mm, W 4,350 mm, D 5,750 mm

The INTERTEX sheet metal storage system, The TowerMat, offers the ideal solution for any application

➤ The type "BL1" has one storage column with an "SRU" positioned in front of it. The type "BL2" is similar to an "LLT" in that the "SRU" is moving vertically in between the opposing storage columns. The type "BLEZ" consists of several "BL1's" in a row with an "SRU" that moves laterally in front of the storage columns to pull/stock trays. The type "BLZZ" consists of several double-sided storage columns in a row left-to-right. The "SRU" again moves laterally to service these storage towers. The loading/unloading station can be on the end(s) of the system and extend sideways, or in front of one or more of the tower bays.



BL1

BL2

Handling Sheet Metal and ensuring process flow.

The sequential use of CNC-controlled sheet metal processing machines can only be ensured if the storage and positioning of the materials is optimised through an advanced storage system. The tray lifting station allows for easy removal of wood pallets and/or wood beams before storing the stack of sheet metal in the storage tray. This makes loading with a forklift easy.

Vacuum Gripper

Single sheets can be easily lifted from the tray by means of a vacuum gripper and directly placed in the sheet metal processing machines.

Safety Devices

The metal sheets can be picked in front of each storage column. The picking station(s) are either secured by a safety fence or by a safety light grid.





Capacity: 34 cassettes / L 6,200 mm, D 620 mm, H 300 mm
 Max. load per cassette: 1,000 kg / Max. load TowerMat: 34,000 kg
 Machine Dimensions: H 7,500 mm, W 6,880 mm, D 2,900 mm



Capacity: max. 320 tablars / L 6,200 mm, D 620 mm, variable
 Max. load per cassette: 500 kg / Max. load TowerMat: 160,000 kg
 Machine Dimensions: H 5,500 mm, W 6,250 mm, D 2,680 mm



Capacity: max. 320 tablars / L 2,448 mm, D 816 mm, variable
 Max. load per cassette: 250 kg / Max. load TowerMat: 80,000 kg
 Machine Dimensions: H 6,800 mm, W 5,948 mm, D 2,680 mm

The INTERTEX TowerMat for lighter-weight storage requirements

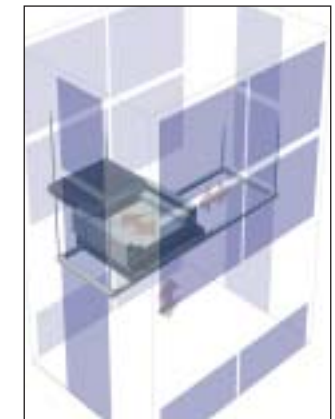
➤ The TowerMat "TLS" covers further customer requirements for lighter workloads. This type allows for a workload of 1,500 kg (3300 lb) per tray and a width of 3,500 mm (11.5') up to a maximum of 6,500 mm (21.5'). All "TowerMats" are available with full paneling on request.

Dynamic "small part" storage system

The "MultiLift" models round off our lower-capacity product line and can store trays up to a width of 4 x 1,224 mm (4 x 48") (QuattroLift) and/or 2 x 2,448 mm (2 x 96.3") (DuoLift) and up to a workload of 500 kg per tray in the opposing columns, making it possible to "handle" up to 8 storage columns with an "SRU". The picking stations are fitted with automatic doors in the back and safety light grids in the front.

State-of-the-art servo drive engineering ensures smooth operation

The power train of our "TowerMat" is custom engineered and features a servo drive to guarantee constant and continuous torque. If the load shifts during stock movement, the necessary position to keep control is forced via an incremental encoder. This ensures long life of the drive components, a completely smooth progression of tray transfer, and results in low overall cost of ownership.



The Multilift does not just carry your goods up and down, but forwards, backwards and sideways as well. A third axis allows twice as many stock positions to be made available.

