



# ASRS Solutions for Heavy & Long Goods

Smart Automation by Kardex & Intertex



Vertical Lift Module Kardex Shuttle 1000 with integrated hoisting crane



Loading/unloading with a hand pallet truck

# Automation of heavy load handling

With the development of more resilient trays, certain vertical lifts (such as the Kardex Shuttle 1000) are particularly well-suited for handling heavy loads. Each heavy-duty tray can accommodate up to 1,000 kg and measure up to 4.05 meters across. This makes it the ideal choice for efficiently storing and picking medium-heavy to heavy parts.





# Kardex TowerMat

## Efficient and space-saving storage for oversized and heavy goods

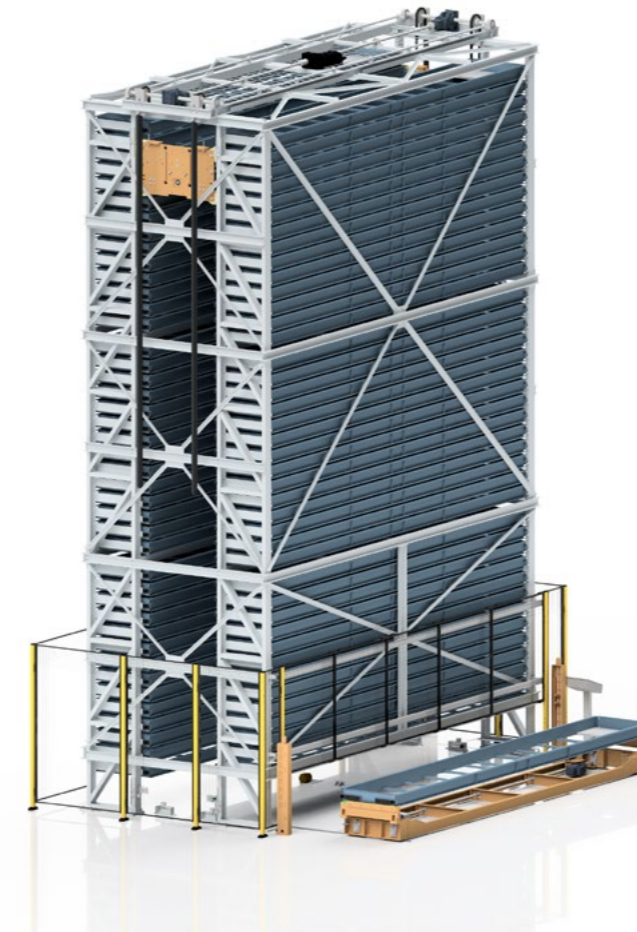
Stock with extreme dimensions and heavy goods requires well-thought-out storage logistics. Inefficient use of space for storing long goods, metal sheets, tools, pallets, or mesh cages creates complex handling challenges and leads to higher costs. Kardex meets these challenges with the TowerMat vertical lift system: a dynamic, flexible solution for maximum efficiency.

Each tray can handle loads of up to 5,000 kg and can be seamlessly integrated into the storage logistics process. Due to its flexible design, the TowerMat makes optimal use of available space, even on small footprints. The result is significantly greater storage capacity and more productive material handling..

### Technical data

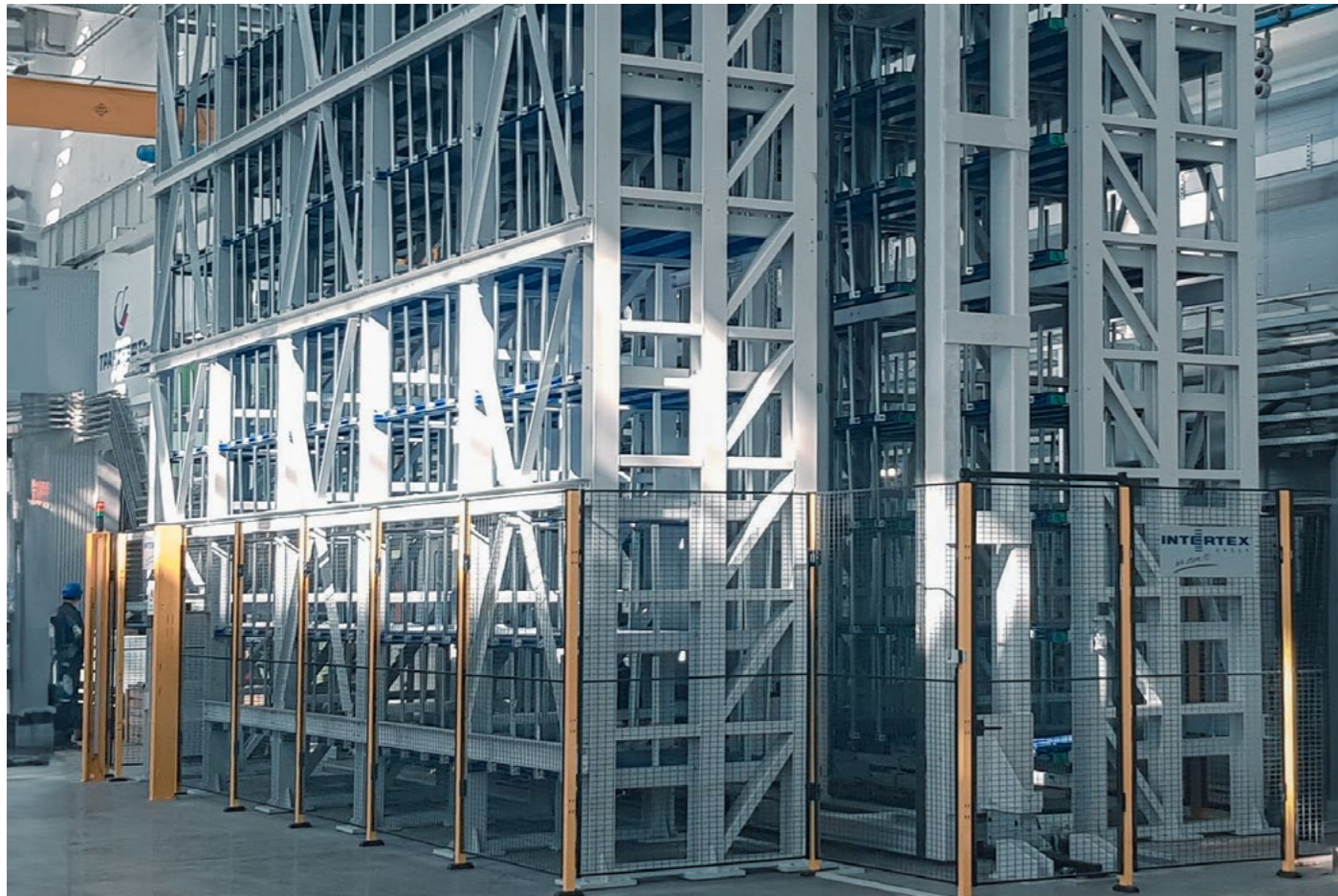
TowerMat	FE (Double-Tower)	EE (Single-Tower)
System height	up to 30 m	up to 8 m
Carrier unit	Width up to 12,2 m Depth up to 2,1 m	Width up to 8,2 m Depth up to 1,5 m
Max. load per carrier unit	5,000 kg	3,000 kg

TowerMat EE



## Flexibility for special forms such as tools and moulds

Storing heavy, bulky tools is especially challenging: Heavy loads and irregular shapes must be stored in a way that saves space and allows them to be safely put away and retrieved. Adapting the unit perfectly to the specifications of the stored goods and the structural environment brings significant benefits in terms of efficiency, reliability and speed. The flexibility and performance of the solutions play a key role in optimising processes.



Modular VLM design for storing medium and large quantities of tools and moulds



Safe loading / unloading of tools and moulds using by overhead crane



Storage of welding equipment and finished parts



Full utilisation of tray space through the payload of 5,000 kg per tray



## The all-round talent for storing pallets

Future-proof solutions must be customized. Kardex applies this principle to storage logistics for heavy load carriers, including pallets and mesh cages. The flexibility and adaptability of the TowerMat means that virtually any material weighing up to 5,000 kg can be stored extremely efficiently on each tray. Optimal productivity in the area of material handling and retrieval is achieved by adapting the unit to the customer's existing systems and building layout.





Full utilisation of tray space through the payload of 5,000 kg



Storage of several Euro-Pallets side by side with a tray width from 3,5m to 8,0m



Pallets can be easily stored and retrieved by using the integrated lift/sink station

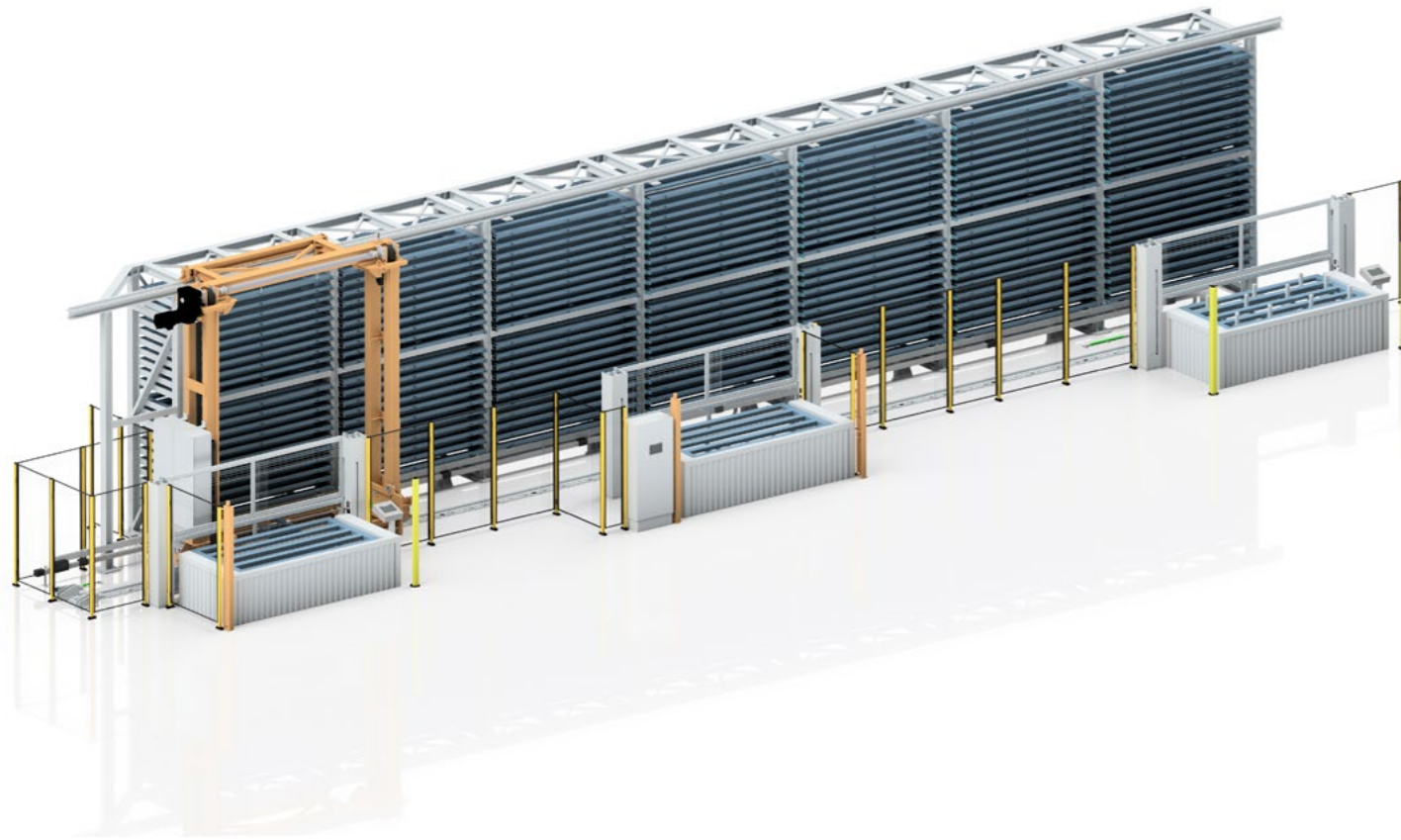


The double bottom in the tray allows pallets with various dimensions to be stored



## Space-saving solutions for long goods

User-friendliness is also crucial when storing long goods. Pipes, steel bars, and similar items up to 12 m in length can be stored efficiently and transported fully automatically. The ability to store loads of up to 5,000 kg, the small footprint and the particularly high storage density are all impressive features. The flexible options for adapting the vertical lift system make it possible to meet individual customer requirements, such as creating a direct connection to saws.



## Large and flat design – the ideal system for sheet metal

Materials with large surface areas, measuring up to 2 × 6 m, are stored in a particularly space-saving manner in the TowerMat storage lift for sheet metal and are automatically transported to the operator. This allows loads of up to 5,000 kg per tray to be transported simply and safely. Kardex supplies special designs with one or two storage towers to meet the requirements of different storage volumes.





# Kardex InterMat

## The strong paternoster for round loads in extreme room layouts

Unused space and long distances interfere with operations and can be expensive. The flexible Kardex InterMat carousel offers the ideal solution to this problem. Making optimal use of the space – for instance by installing a bridge carousel above the production area, above internal transit routes, or in awkward corners – has a direct impact on increasing efficiency. Round and heavy goods occupy minimal storage space and can be easily transported to the access opening in their carrier units thanks to the multi-loop design.

### Technical data

System height	up to 15 m
Carrier unit	Width up to 14,2 m Depth up to 1,2 m
Max. load per carrier unit	4,500 kg

## Space-saving storage solution for tyres

The paternoster principle has proven especially useful for the storage of tyres. The InterMat carousel makes full use of the available room height and depth and is therefore good for high-density storage. Tyre and car manufacturers benefit from fast access to smaller car tyres, large aircraft tyres and heavy rims. This optimised material flow leads to a long-term increase in overall productivity.



## Safe cable reel intralogistics

Cable reels and other heavy round items must be stored safely, not take up too much space and be easily accessible. InterMat is a carousel designed for this purpose and can be installed in pits, outdoor areas or as a T-bridge paternoster. The model is particularly user friendly and safe. Goods are stored and retrieved easily using a loading trolley. In addition, sectional roller shutters offer protection from unauthorised access or serve as sluice gates.



# Always close to you – worldwide

Kardex is a leading global partner for intralogistics solutions in an attractive and growing market. The Group offers premium automated products, standardized systems, and life cycle services that guarantee high availability and low total cost of ownership. Kardex provides an intelligent entry into automation with its dynamic storage and retrieval systems, offers integrated material handling systems, small parts storage systems, and automated high-bay warehouses, and acts as a global AutoStore™ partner, offering flexible and modular storage and order fulfillment solutions. The Group employs around 2'900 people in over 30 countries. Kardex Holding AG has been listed on the SIX Swiss Exchange since 1989.



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