

Buyer's Guide

Heavy Goods Storage



Manage heavy goods with ASRS

Handling and storing heavy goods require particularly well thought out logistics. Due to their weight and size, these items often require special handling. Heavy inventory can become an ergonomic nightmare putting workers at risk of injury. This large sized inventory takes up a lot of space leading to poor space utilization.

With automated storage and retrieval systems (ASRS) from Kardex Remstar, heavy duty items can be handled ergonomically and in a smaller footprint. Whether you need to store large tools for the production line or tires for your service department, Kardex Remstar offers various ASRS to manage this wide variety of inventory.



Kardex Remstar solutions

The size and weight of the items you're storing, as well as the floor space available, should determine the type of ASRS which would best suit your business. In addition, there are several options and enhancements for some of these units to provide ergonomic handling, keeping your employees and product safe. Kardex Remstar offers four unique solutions to meet your needs.

	Kardex Megamat 650	Kardex Shuttle 1000	TowerMat	InterMat
Weight capacity	Up to 650kg/carrier	Up to 1,000 kg/tray	Up to 5,000 kg/carrier	Up to 4,000 kg/carrier
Heavy tools	✓	✓	✓	
Dies & molds	✓	✓	✓	
Fixtures	✓			
Pallets		✓	✓	
Long goods (pipes, steel bars, etc.)			✓	
Round items (tires, cable reels)				✓
Options	<ul style="list-style-type: none">Controlled environments: clean, dry, temperature	<ul style="list-style-type: none">CraneCustom tray for pallet storageManual or automatic extractor tray (1,000 kg)	<ul style="list-style-type: none">Single tower or double tower	<ul style="list-style-type: none">Bridge installation

Types of technologies

Vertical Carousel Module Kardex Megamat 650

Vertical Carousel technology has been on the market for decades. Vertical Carousel Modules are a series of carriers attached in fixed locations to a chain drive. Movement is powered by a motor, which sends the carriers in a vertical loop around a track in both forward and reverse directions – similar to a Ferris wheel. Goods are stored or retrieved through an ergonomically positioned access opening with a work counter. To accommodate businesses with heavy, like sized items, the Vertical Carousel Module Kardex Megamat 650 has a weight of 650 kg per carrier.



The Kardex Megamat 650 is ideal for heavy loads up to 650 kg.



Vertical Lift Module Kardex Shuttle 1000

Vertical Lift Modules consist of two columns of trays with a mechanical inserter/extractor positioned in the center. The inserter/extractor travels up and down between the stored trays, automatically locating and retrieving them as needed – similar to an elevator with doors that open on both the front and the rear.

The Kardex Shuttle 1000 from Kardex Remstar has the highest weight capacity of the VLM family, handling up to 1,000 kg per tray. Further, to improve ergonomic handling, the Kardex Shuttle 1000 can be equipped with a dedicated crane to lift these heavy items and keep your employees safe from injury.



The VLM will maximize density in the smallest footprint.

TowerMat

A TowerMat operates similar to a Vertical Lift Module. The TowerMat utilizes a stacker crane which transports long goods to an ergonomically positioned workstation. This system can be designed with one or two storage towers for maximum capacity. The TowerMat has flexibility for many different storage mediums from long goods to pallets and heavy tools.

In addition, the TowerMat stores these unique shaped, heavy items in a compact footprint. Maximizing the vertical height, these items are densely stored within the unit, increasing capacity as your business needs change.



The TowerMat stores the heavy items in a compact footprint.



InterMat

The InterMat is a Vertical Carousel Module for round storage with unique requirements, for example tires or cable reels. Operating as a traditional Vertical Carousel Module, the InterMat supports storage of up to 4,000 kg per carrier. Delivering stored items, directly to an operator at an ergonomic height and reducing storage space of these round and heavy goods. In addition, the InterMat allows for flexible integration into your existing facility. Taking advantage of previously wasted overhead space, the Intermat can be installed as a bridge carousel above transit routes or in awkward corners to further increase efficiencies.



The InterMat supports storage of up to 4,000 kg per carrier.



Which one is right for you?

Ultimately, the size and weight of the items you're storing, as well as the floor space available, should determine the type of ASRS which would best suit your operations. The benefits of automating your heavy duty handling include: recovering wasted floor space by up to 85%, increasing productivity by 2/3, increased pick accuracy up to 99.9%, increased inventory control and improved ergonomics. Heavy duty items require special handling and each of these solutions can be adapted to meet your needs.