

CR18 Pallet racking



Introduction to pallet racking

Storing goods on pallets is the most common method to manage warehouse stock. Pallet racking is the most effective method of storing pallets, but understanding what type of structure is needed can sometimes be confusing.

Pallet racking is manufactured from steel, which can be a costly commodity. Having an extensive range of products to choose from, means that we can achieve the loading capacity you require, with a pallet racking structure that suits your operation, in a cost effective way.

Our systems can be easily configured in a variety of ways based on your needs and pallet load, to ensure a functional and logical warehouse storage solution for you.

Whatever the industry, there's a range of storage systems that can provide optimal storage economics. From Drive-in Racking or Mobile Racking (MOVO) for frozen and cold-store goods; to First-in, First-out (FIFO) Pallet-flow systems for bulk goods such as those with a "best before date".

System comparison and distinguishing characteristics

	Low investment	High floor utilisation	High volume utilisation	Easy to adjust and adapt	Good for individual pallet access	FIFO can be obtained	Good for handling large product range
Wide aisle (standard) pallet racking	●			●	●	●	●
Narrow aisle	●			●	●	●	●
Deepstore/Drive-in	●	●	●				
Pallet shuttle system	●	●	●			●	
Pallet flow FIFO		●	●			●	
Push back		●	●				●
Mobile pallet racking (MOVO)	●	●	●	●	●	●	●

● Best option ● A good option

See next pages to find out more about other racking systems and accessories we offer.

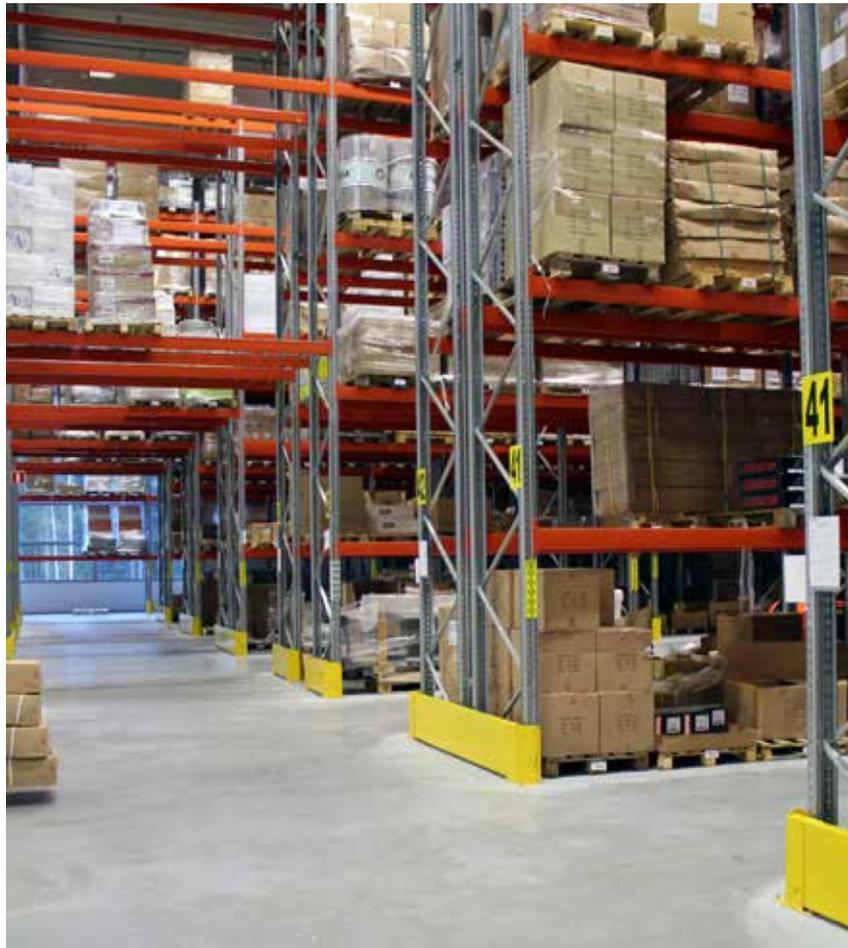
Wide aisle pallet racking

Core features

- Free and unrestricted access at all times
- Optimum adaption for the full range of pallets
- Rack heights of up to 15m and maximum bay loads of up to 30 tons
- CR18 components are permanently protected against corrosion

Why wide aisle?

- It's suitable for bulky mixed pallet goods
- Our most popular racking solution has been sold for over 50 years
- It's suited to standard counter balance forklift trucks



CR18 Wide Aisle Pallet Racking provides your warehousing teams with unrestricted access to all your pallets at all times. The system delivers versatility and assembly as single- or double-depth racks.

CR18 Pallet Racking easily adapts to your specific warehouse and storage requirements, thanks to a variety of widths, depths and heights. In fact, CR18 Racking will fit into any space available, and is suited to all kinds of pallets – whether they be Euro, Chep, disposable or captive pallets, mesh boxes or bins.

The modular, future-proof system adapts perfectly to your particular needs – thanks to different beams, angle supports and shelves and extensive accessories range.

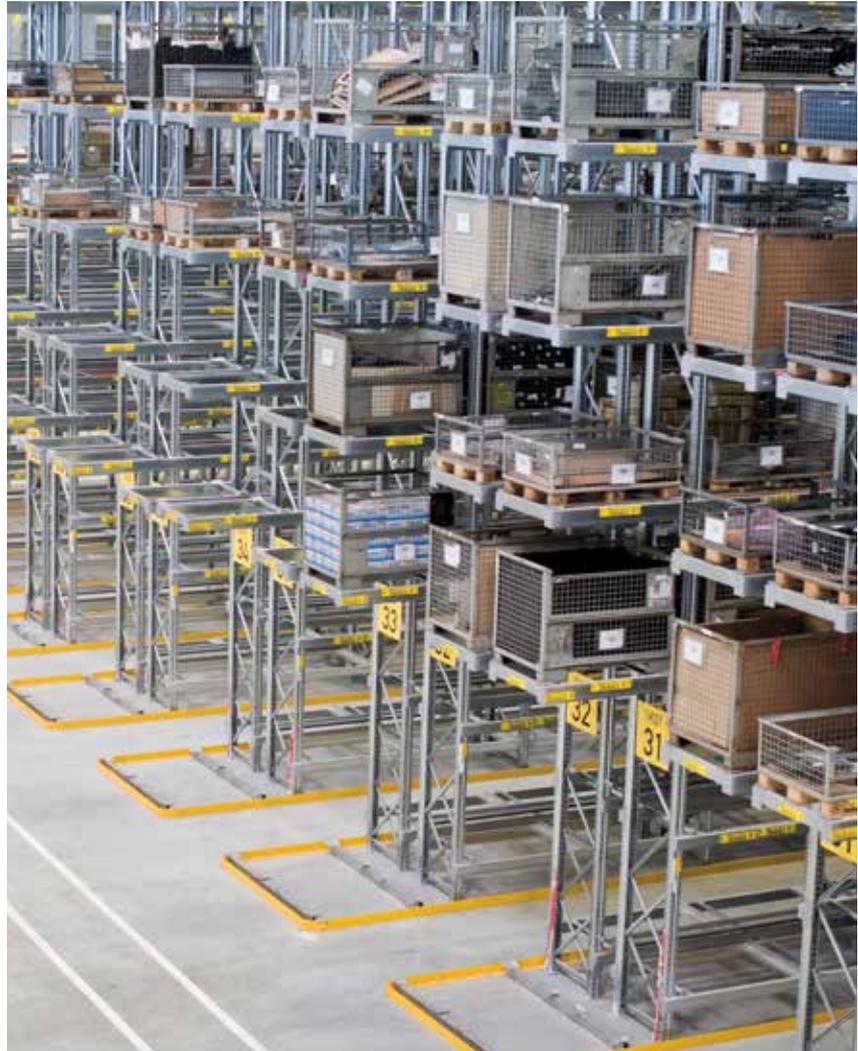
Narrow aisle

Core features

- Total and unrestricted accessibility to individual pallets
- Optimum configuration for maximum storage, density and efficiency
- Makes optimum use of any given floor area, storage space and warehouse height (up to 20m high)
- Any additional costs offset by added value of improved space
- Used in conjunction with very narrow aisle (VNA) trucks

Why narrow aisle?

- Holds more pallets in comparison to wide aisle
- You already have VNA trucks



Narrow Aisle Pallet Racking is your ultimate space-saving option if your warehousing or storage floor space is limited. It gives your teams maximum storage capacity, and allows for quick order-picking and fast accessibility to every pallet.

Narrow Aisle Pallet Racking combines a wealth of features to enable the best possible use of space, and fast order-picking. Compact and efficient, it's a construction set-up used in a wide variety of industries where warehousing space is limited.

Varying system heights and depths, together with height-adjustable supporting beams assure maximum flexibility with man-down, high-lift stackers, or man-up-order-picking stackers. It's a system perfectly suited for convenient pallet storage and retrieval or for fast order-picking straight from the pallet. Handling equipment is often highly automated, and guided by wire or rail.

Mobile pallet racking (MOVO)

Core features

- Save up to 50% of the space required by conventional pallet racking, and increase storage capacity by up to 80%
- Cuts energy, operating and cleaning costs; allowing for a good ROI
- 100% individual pallet access
- Suitable for any kind of warehouse goods
- Guaranteed operational safety of -30° C; ideal for use in cold-storage rooms

Why MOVO?

- Ultra high density storage
- You need to increase your storage, but can't expand your warehouse
- It's great for the food industry, can be used in ambient or cold store



Mobile Racking (MOVO) is a dynamic solution providing up to double the storage capacity in the same area, of conventional pallet racking. Offering technical superiority and total flexibility, MOVO is suitable for every kind of stored goods, and has a wide range of accessories.

The electronically controlled MOVO high-load racking system runs on in-ground rails and can carry bay loads of up to 24 tons at racking heights of up to 12 meters. While state-of-the-art sensor technology and variable control options ensure ease of operation and absolute safety.

Pallet shuttle

Core features

- Cost effective and time-saving; not requiring the use of special forklifts
- Low level of risks or damage to the equipment and operating staff
- Fast and sustainable; automatically handles pallet picking and retrieval
- Can pick up, deposit and re-organize pallets with great precision
- Operating temperature ST: 0°C to +45°C / BZ: -1°C to -30°C / Hybrid model can be used in both temperature ranges
- CE mark approved
- ATEX versions available

Why pallet shuttle?

- Offers more effective, high-density storage
- Reduces the number of forklift trucks needed
- Long term storage of goods



The Pallet Shuttle system is a semi-automated, high-density storage solution for the handling of goods inside channels similar to a drive-in or pallet-flow setup.

Cost-effective and time-saving, it removes the need for forklift trucks to enter the racks.

The remotely controlled Pallet Shuttle is a highly efficient alternative to live storage and drive-in racking. The Pallet Shuttle system works either as First in, First out (FIFO) or as Last in, First out (LIFO) for operations with a reduced number of product lines stored in high quantities.

Drive-in

Core features

- More storage per cubic metre than any other storage system
- High density storage - maximising floor and storage space
- Accessible by the LIFO principle
- Smooth pallet rails – for safe, snag-free load-bearing

Why drive-in?

- High density, high storage volume
- Limited stock rotation - ideal for seasonal goods and chilled storage



If you're storing large quantities of similar or identical goods, the CR18 Drive-in Pallet Racking can free-up as much as 90% of existing floor space, compared to conventional pallet storage.

CR18 Drive-in Pallet Racking creates efficiencies by reducing aisle loading and unloading times, yet allowing greater access compared to block-stacking. Positioning pallets on front-to-back rails allows rows to be stacked next to each other safely and efficiently; crucial for items regarded as fragile or unstable.

The Last-in, First-out (LIFO) principle means individual pallets can be accessed one-by-one from the front of the rack.

Multi-tier

Core features

- Combines wooden, mesh, grating or steel shelves depending on requirements
- Increased number of picking levels
- Can combine pallet storage and small goods storage
- Removes the need for a mezzanine floor
- Easily incorporates fire sprinkler and lighting systems

Why multi tier?

- Maximises use of the full height of the building
- Can't extend the warehouse outwards, but have height available
- Allows order-picking on multiple levels



With Multi-tier Pallet Racking from Constructor, you can create manual pick-lanes for your teams at various levels, by providing walkways built into the pallet racking structure.

Our Multi-tier Pallet Racking offers optimum use of space over that of traditional mezzanine flooring structures and layouts. This type of pallet racking structure creates a number of levels and walkways for storing and collecting goods – everything from cartons and boxes, to garment storage on hangers.

Multi-tier structures can either be installed directly from the floor or alternatively on top of a specially designed mezzanine structure – allowing for a multi-functional storage area below.

Pallet flow

Core features

- Dedicated load and retrieval means only two forklift truck aisles are required
- Uses up to 60% less floor space than conventional pallet racking
- FIFO operation – for automatic stock rotation
- Faster, more efficient warehouse picking speeds

Why pallet flow?

- Bulk/high density storage
- More efficient alternative to block stack
- Ideal for logistics flow in a warehouse or production facility



Pallet Flow Racking, or 'Pallet Live Storage' is ideal if you operate a First-in, First-out (FIFO) goods storage setup. With this system you can use up to 60% less space than if you were to use conventional pallet racking.

Our Pallet Flow system offers a dynamic storage solution with integrated conveyor modules to suit most pallet types and sizes. It's well-suited for the drinks industry or as a buffer storage facility in manufacturing.

Pallets travel smoothly on full-width or twin-track rollers. While the front pallet is removed on the front side of the rack, the rear pallet is held back. Pallet movement is always safe and smooth thanks to automatic braking, along with a combined load guide and end stop unit.

Push back rollers

Core features

- Up to 75% increase in storage capacity compared to conventional storage
- Operations reduced to a minimum
- Quick and easy access to all channels
- Ideal for bulk storage and cold store
- Accessible by LIFO principle
- Very high occupancy rates compared to Drive-in Racking or Block-stacking

Why push back rollers?

- High density, high storage volume



Push-back Rollers – a dynamic storage solution based on the CR18 Pallet Racking System and including wheel/roller conveyors. Ideal if you're storing bulk goods on pallets according to the Last-in, First-out (LIFO) principle.

Once a pallet is picked from the pick-face, the rest roll forward automatically under a controlled speed. Up to 9 pallets can be stacked in this way.

Push-back Rollers can also be used to provide additional storage space in otherwise unusable areas, such as above cross-aisles or around dock-levellers.

Cart push-back trolleys

Cart Push-back Trolleys provide your teams with high-density live storage so they can have quick and easy access to loads in warehouse environments. They can load and unload pallets from the same aisle face; reducing truck travel distances and cutting cycle times.

A range of trolley sizes is available to suit all types and sizes of pallets. Colour coding of trolleys and a unique multi-wheel design aid stock identification and ensure trolleys run smoothly and reliably – even in the demanding environment of a cold stores.

Cart Push-back Trolleys can also be used to provide additional storage space in otherwise unusable areas, such as above cross-aisles or around dock-levellers.



Why push back carts?

- A cheaper alternative to push back rollers
- Ideal for bulk storage/ cold store

Core features

- Quick and easy access to all storage lanes
- Pallets automatically presented at the rack pick face
- Accessible by Last-in, First-out (LIFO) principle
- Up to 6 pallets deep
- Very high occupancy rates, compared to Drive-in Racking or Block Stacking

Carton flow

The Carton Flow Picking Unit system is a fast and flexible solution for you to transport components to assembly stations without interruption. You can also easily adjust the shelves and wheels to ensure efficient movement of various sized packages.

The Carton Flow Picking Unit system is flexible enough to allow for changing and evolving warehouse layouts, thanks to the fact that it can be built as a stationary unit, or supplied with lockable wheels.

Alternatively it could also be integrated into pallet racking on any lower levels, below bulk storage, for example.



Core features

- Adjustable, ergonomic racks – for ultimate handler efficiency
- Separate loading and unloading – picking can be carried out uninterrupted on either side
- High packing-density for carton storage – meaning more floor space
- Simple, fast installation
- Straightforward, modular system

Why carton flow?

- Great for line side production
- Reduces travel distances and picking times

Accessories

If you're looking for racking for your warehouse or storage facility that's a little less 'off-the-shelf', Constructor are the team that can provide you with a truly tailor-made solution.

Thanks to our extensive range of accessories and optional add-ons, our pallet-racking range can be easily tailored in a variety of ways, and integrated in a variety of existing systems and set-ups. Whatever your requirements or pallet load.

Whether you're using our Drive-in racking, Mobile racking (MOVO), or storing bulk goods, for us it's all about providing you with optimal storage economics, so you can achieve the perfect balance between investment, volume and handling.



Sprinkler bracket

The rise in popularity of in-rack fire sprinklers has produced many benefits for warehouse safety.

Available in two sizes to reflect the different loading requirements, the CR18 Sprinkler bracket is one-sided and can be installed directly onto the upright.



Load and assembly signs

Signage for loading and assembly instructions, which can be mounted on the racks.

All warehouses must have a sign and marking system. It is the basis for an effective handling system within a warehouse, giving correct and fast identification for picking as well as loading of goods.

Accessories



Sign and marking systems

The sign and marking system consist of information notice boards, aisle signs, labels and holders for marking of beams in pallet racking and shelving systems.



Wire mesh shelf

Mesh decking/shelving sits on the pallet racking beams and acts as a shelf. It is suitable for small carton storage at picking levels, storage of non standard pallet sizes and to offer protection for operatives and fork lift truck drivers working under tunnel bays.

Mesh Shelving is ideal for use in ambient warehousing as well as chill stores and freezers as it allows the even distribution of air and thus temperature.



Steel shelf panels

These panels are placed across BX-beams to provide a heavy-duty steel shelving surface for hand-loading.

They are not designed to support pallets.



Wooden decking

Slatted softwood timber panels placed over the pallet racking beams to support small goods, damaged or undersized pallets.

Wooden decking is suitable for both loading by hand or by warehouse handling equipment such as forklift trucks.

Accessories



Grating module

Manufactured from steel strips that are press locked together, these grating modules are suitable for both light and heavy duty applications from small cartons to heavy industrial tooling. Their shaped profile ensures that the grating module will not easily dislocate from the pallet racking beams.



Shelf dividers/partition

Used to separate stored items and create smaller shelf locations by compartmentalising the storage level.



Horizontal divider

Ideal for segregating vertical standing goods in standard pallet racking.

Horizontal Dividers are made to order and customised to suit your products. They are fixed to a beam at the rear of the bay and project forwards into the bay creating individual fixed or adjustable compartments for different stock lines.



Safety insert

To support pallets 600 x 800 mm (= half EURO pallet).

The spacers positioned in down-aisle direction are designed to provide support for unbound or damaged pallets.

The guard is not designed as a safety net to collect loose boxes or cartons that may fall from a pallet.

Accessories



Cross beam / pallet support

To support pallets in front-to-back direction directly on the beam (without front to back base boards).



Barrel support / chock

These parts are used for storage of barrels, drums and cable reels in the racks in a similar way as pallets.



Cable reel suspension

For storage of larger cable reels or carpet rolls that are supported on an axle through their center to be stored in the rack.

Safety accessories

All our storage solutions are manufactured to the highest quality and designed to stand the test of time, even in the most intense of operating environments.

Our range of safety accessories, designed to complement and further customise an existing set-up, mean you have the assurance that your operatives are safe, and that you comply with all necessary regulations.

What's more, with our ongoing support, guidance, safety inspections and comprehensive audits, you're always ready for what the industry throws at you – without ever having to compromise on the strength, stability and integrity of the solutions you have installed, or on the health & safety of your teams.



Anti-collapse mesh

Anti-collapse mesh attaches to the backend of your warehouse's pallet racking and shelving to provide your operatives protection against any falling objects. It's also great as fencing to warn and protect your teams against machinery or hazardous materials.



Floor mounted column guards – inside fix

Increased protection for pallet racking uprights without outside floor fixings.

Inside Fix has been developed in response to demand from customers. It incorporates all the protection features of the existing Column Guards but by having the fixings inside the guard, it also prevents possible pallet damage. These internal fixings include rubber bushings which act as shock absorbers to minimize the effect of any impact.

Safety accessories



Floor mounted column guards

A substantial form of protection for pallet racking uprights, protects against low level impact damage caused by forklift trucks.



Column guard with foam

Metal column protection that's attached to the upright with shock absorbing foam inside.



Snap on column guard

Protect-it™ can absorb large impacts and easily attach to a column without additional fasteners.



Rack end protectors

A robust barrier, ideal for protecting vulnerable areas from forklift truck damage and impacts.

Safety accessories



Vertical back stops

A useful safety feature which prevents pallets from falling from the back of the rack.



Metal bollards

Metal safety bollards are manufactured from robust steel tube, these 164mm diameter barriers are available in a range of heights.

Constructor Asia Sdn. Bhd.
(a member of Eonmetall Group Berhad)

Lot 1258 & 1259, Mk 12, Jalan Seruling,
Kawasan Perusahaan Valdor,
14200 Sungai Bakap, Penang, Malaysia.

+604 582 8323

+604 582 1525, 582 8676

info@constructor-asia.com

www.constructor-asia.com



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