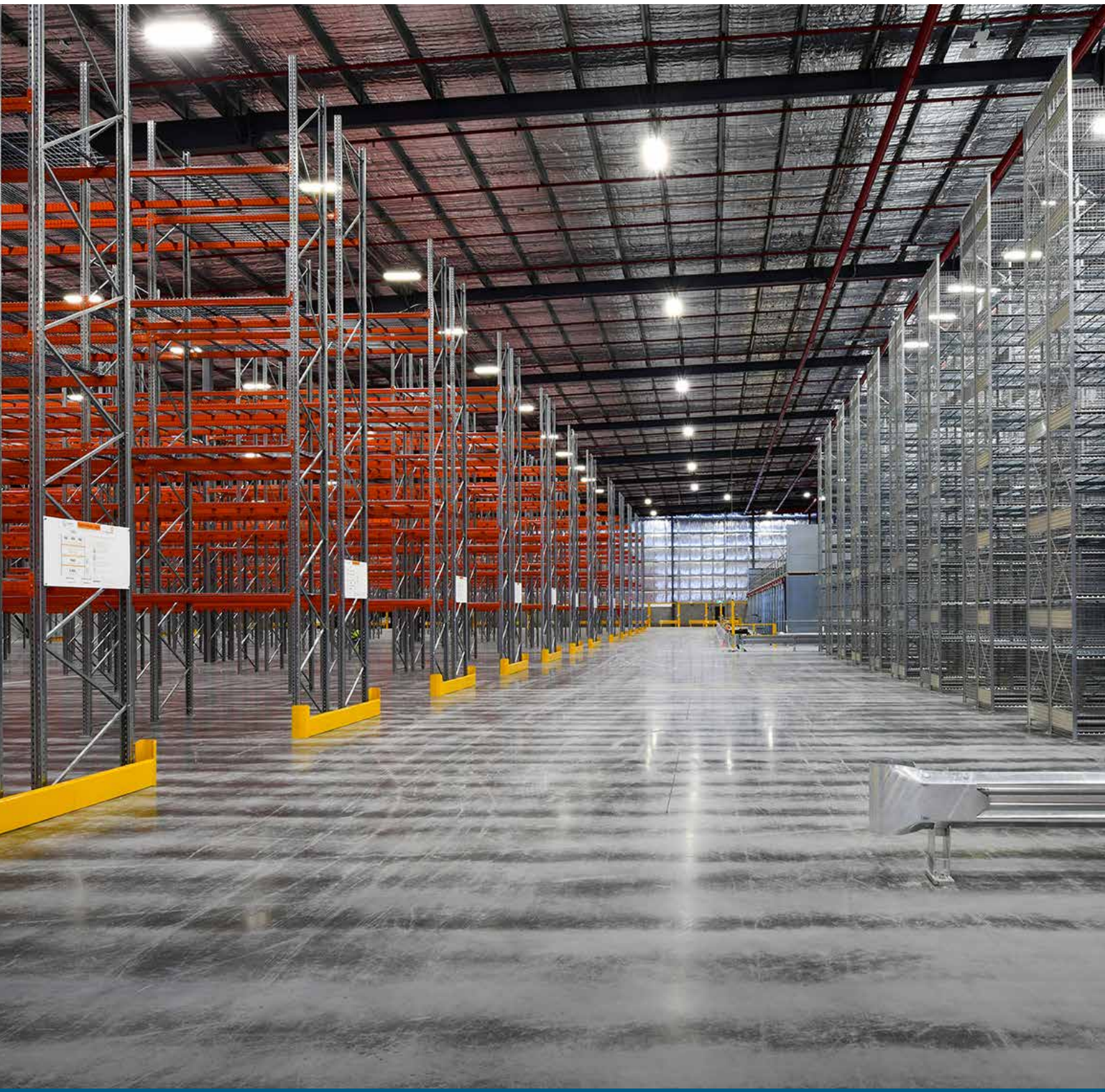
Gonvarri
Material Handling

safer storage systems

Pallet racking

and other racking systems



Safer Storage Systems

Australia's innovative storage solutions provider

Here at Safer Storage Systems, we create customised storage solutions for businesses Australia-wide. With a 15+ year heritage and specialist teams in place, we know racking and ensure every detail of your project is covered.

Our experienced team works with you through a consultative service, analyses your space and uses the findings to engineer a solution that fully optimises your storage facility.

Safety and quality are paramount through everything we do, and our product range is no exception. It's why we have partnered with Gonvarri Material Handling (GMH) to become the exclusive Australian supplier of the comprehensive GMH range. It gives businesses right across the country access to equipment from the world-renowned, European storage manufacturer.

Australian made pallet racking

Safer Storage Systems is proud to be one of the few racking companies manufacturing product in Australia and is passionate about growing Australia's manufacturing presence.

We have commenced the production of P90+ Racking in Melbourne and are also equipped with industrial welding machines and paint line at our Dandenong South premises to weld and paint beams on demand.

Local manufacturing offers our customers shorter lead times, lower freight costs and consistently high quality at any time of year. It also reduces the reliance on international supply chains, giving us and our customers confidence in product access now and well into the future.

About Gonvarri Material Handling

Gonvarri Material Handling is comprised of world-renowned brands, including Gonvarri Material Handling, Constructor and Kasten. The product range incorporates cutting-edge steel pallet racking and shelving systems, as well as storage machines and automatic systems.

With first-class manufacturing facilities strategically located in key markets of Russia, Romania, Germany and Finland, Gonvarri Material Handling is one of Europe's leading forces in engineering and manufacturing of storage solutions having helped some of the world's major brands and pioneering SMEs since 1856.

Gonvarri Material Handling is owned by Gonvarri Industries, a multi-national organisation operating in steel transformation in auto, road safety, material handling and solar energy sectors with a global presence operating in 19 countries worldwide. This rich history and global presence is testament to the Group's commitment to providing ongoing service and support.

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)	●	●	●	●	●	●	●
Crane racking			●		●	●	●

● Best option ● A good option

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

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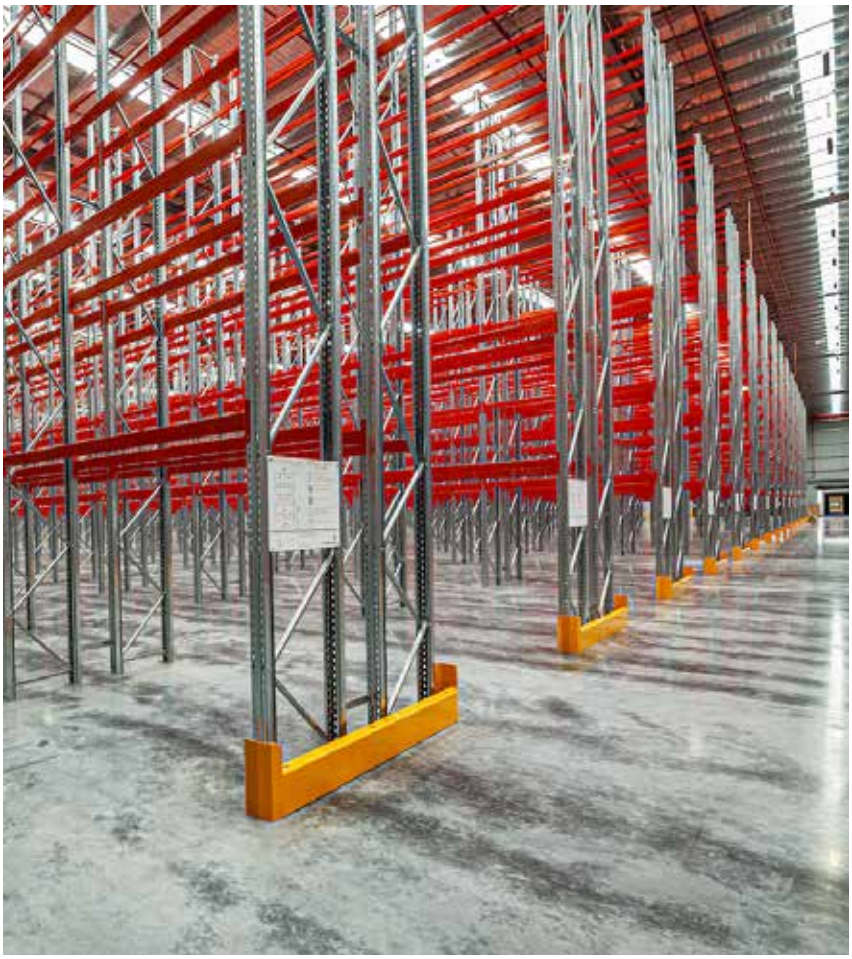
Selective racking

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
- P90 components are permanently protected against corrosion

Why selective?

- 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



Not only is selective racking the most common configuration for any warehouse, this type of shelving allows for the very best view and accessibility to your stock.

As the pallet locations are built into single runs, either stand alone (single entry) or back to back rows (double entry), all pallets are aisle facing. This gives maximum visibility to your products, as well as the ability for a forklift operator to select any product at any one time.

Beam levels are fully adjustable depending on the weight and size of your products. In most cases, top beam levels can be positioned up to 15 metres high, allowing for greater use of the height of your warehouse.

Double deep racking

Core features

- Increases storage capacity by 30-40%.
- Reduced number of aisles.
- Store single product lines within the same location.
- Cost effective system.

Why double deep?

- Increase storage capacity in your existing facility
- Can be used in both ambient or cold storage facilities, ideal for food industries
- Increase picking efficiency

Twice as deep as selective racking, a Double Deep Pallet Racking configuration allows for the storage of two pallets per location and can be stored a maximum of 5 levels above the ground. This saves on aisle space and allows for an increased storage capacity in your warehouse.

Double Deep Racking systems can also increase picking efficiency – as products are contained within a smaller area, they're easier to locate.

To access the second pallet, a double deep forklift or special forklift attachment is needed. However once set up with this equipment, the benefits of this storage configuration can outweigh this initial investment. These forks can also be used to access pallets in other racking systems.

Guide rails are also added to the top beam levels to assist the drivers in lining up the fork with the pallets sitting higher in the racking.

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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

When you're looking at ways to get more from your warehouse, Narrow Aisle Racking offers a number of benefits. Available in single or double deep depth racking configurations, this storage system can accommodate pallets, boxes, mesh containers and more.

Beam levels can be unique to each bay or consistent across the entire system, giving you great flexibility around what and how you utilise your storage space.

Just like standard racking, additional frames and beams can be added to your starter bays to adjust the configuration to adapt as your business grows for extra capacity.

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

Our Mobile Racking (MOVO) is an electronically controlled, high-load racking system. It runs on in-ground rails with state-of-the-art sensor technology for ease of use and safe operation.

This Mobile Racking System can double your storage capacity, eliminating the need for aisle spaces. It is able to carry bay loads of up to 24 tonnes at racking heights of up to 12 metres to maximise your storage space.

Operate your MOVO system via a touch screen with clear graphical display that is simple, yet powerful.

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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

Our Pallet Shuttle system offers a fast, accurate and high density storage solution. The semi-automated system uses a pallet shuttle to deliver and retrieve pallets from within the system, which means forklifts do not need to enter the racking – reducing any risk of damage to the structure itself.

The Pallet Shuttle is operated by remote control to provide a highly efficient alternative to live storage and drive-in racking. Offering either First in, First out (FIFO) or as Last in, Last out (LIFO) storage conficuration our Pallet Shuttle is ideal for cold storage and ambient applications, as well as long-life food and beverage storage.

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

Why drive-in?

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

Drive-In pallet racking is very effective for the storage of large quantities of the same or similar products. Our Drive In storage system provide maximum storage capacity with the one of the lowest warehouse footprints.

Using a first-in, last-out (LIFO) picking structure, it's ideal for high density storage of products which are ordered into the warehouse in large quantities and sold out to consumers quickly.

Pallet trucks drive into the "drive in" channels to access or place pallets on the beams which run straight out from the back of the system, unlike other pallet racking where the beam levels run horizontally to the frames. Drive-in pallet racking also ensures that pallets are well supported without the need to add mesh decks, saving you costs on accessories and space.

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Crane racking

Core features

- High density storage - maximising floor and storage space
- Can be linked to WMS systems
- Accessible by the FIFO and LIFO principle
- Reduced pick and replenishment errors
- Maximise pallet movements per hour due to speed of cranes

Why crane racking?

- Very dense storage
- Ambient and freeze versions are available
- Big savings on labour costs
- Improved productivity and reduction in errors

ASRS, or Crane Racking as it is otherwise known, is an efficient and fully automated storage and retrieval system. With narrow aisles and heights of more than 30 metres, this solution offers efficient, high density storage for a large variet of pallets.

Crane Racking adapts to any warehouse with ease. From pallet load capacity and building heights, to storage cycle times and temperature control, this system is designed for complete flexibility.

As the name suggests, Crane Racking is equipped with cranes, which are guided by a management software system. The cranes travel along the aisles of the warehouse, then automatically position themselves to extract the goods before delivering each item to the front of the racking. It means warehouse staff do not have to enter the racking to pick the goods, making it safe, fast and highly accurate.

There is also the option for multi-deep configurations. A shuttle can be added to the crane to assist with the retrieval or storage of pallets.

Crane racking can also be designed as part of a rack clad building. The pallet racking structure forms the building frames to support the walls and ceiling. Cladding is added directly onto the racking, which means that every inch of the warehouse can be utilised for storage. These structures are designed to handle external loads as well as support the crane and racking.

Multi-tier

Core features

- Floor capacity of up to 1000kg/m^2
- Floor spans of up to 10 meters
- More economical than a permanent concrete structure
- Efficient construction
- Demountable and does not affect existing building structure

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

Get more from your existing space with a Mezzanine supported by P90+ Racking. Create a new structure or add on to your existing racking to level up your warehouse storage.

Mezzanines, also known as Raised Storage Areas, are a demountable structure, which offers the ultimate flexibility. Move or reconfigure the system to suit your changing business needs. Safety features include sprinklers, lights, guards and rails to offer the greatest peace of mind and ensure your warehouse complies to WorkSafe standards.

Custom frame sizes are also available, including taller frame sizes for multi tier applications. So you get exactly what you need.

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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 is a gravity fed storage system, which allows products to be loaded from the back and picked from the front. Once a carton is empty and removed from the rack the next box will roll to the front automatically. Also known as Pallet Live Storage, Pallet Flow Racking offers a First-In, First-Out (FIFO) storage flow, and uses 60% less space than standard, single entry pallet racking.

With integrated conveyor modules, Pallet Flow Racking is a dynamic storage solution suits most standard pallets. Pallets always travel safely and smoothly on full-width or twin-track rollers. Combined with automatic braking, a load guide and end stop unit, this system is ideal for the storage of beverages, and well suited in manufacturing plants.

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 P90 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.

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Pull out units

Our Pallet Pull-Out Units let your teams move pallets back and forth like drawers, even with a full load up to 1000kg. With such efficient storage, they can free up the excessive clearance distance needed above pallets.

The Pallet Pull-Out Unit saves both time and space to ensure an efficient working environment and ergonomic picking. By installing pull-out units in your pallet racking, the number of pallet and picking locations can be increased, while still taking up the same space as before.

What's more, shorter operation distances allow for faster and more efficient picking, while at the same time freeing up valuable floor space.

Core features

- Increase storage capacity
- Create space
- Allow easy access
- Increase picking rates

Why pull-out units?

- Highly improved ergonomics for your workers
- Suitable for picking parts from a pallet

Optional customisation

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

Optional customisation

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Accessories

If you're looking for racking for your warehouse or storage facility that's a little less 'off-the-shelf', Safer Storage Systems 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 P90 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.

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.

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Accessories

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.

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.

Accessories

Pull out unit with casters

Pull-out unit which can be secured to the floor, with casters at the front, enabling floor level pallets to be pulled out.

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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

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

Safety accessories

Column guard with foam

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

Rack end protectors

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

Metal bollards

Metal safety bollards are available either painted or galvanised. Manufactured from robust steel tube, these 164mm diameter barriers are available in a range of heights.

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Introduction to long goods storage

If you're looking for safe, organised storage of your long and heavy goods, then why not try our made-to-measure Cantilever systems for size.

Designed to meet nothing less than your precise requirements, our Cantilevers are exceedingly versatile whatever your work environment, and with no front uprights, all levels are available to forklifts.

We have other systems available that are also designed to store long goods. Our Cantilever Racking, Rollrack, Timber locker, and A-rack* are all specially designed to store various length items – steel bars, pipes, tubes, furniture, packs of timber; as well as boards, metal sheets, crates and boxes, or white goods.

Heavy duty cantilever

Core features

- Totally bespoke system according to user requirements
- Columns, bases and horizontal arms – creating a complete structure
- Ideal for safe and efficient storage of long or large goods
- Adjustable length and spacing between profiles

Why heavy duty cantilever?

- Maximises horizontal space
- Can be installed on a MOVO heavy duty mobile trolley

The Medium & Heavy Duty Cantilever is ideal if you need to store long and difficult items such as steel bars, piping, tubes or timber. Storage is horizontal, so can be handled manually or by forklift.

The Medium & Heavy Duty Cantilever is a versatile, modular system for storage of long or large goods. It's perfect for all types of warehousing environments, and with no front uprights obstructing load placing and retrieval, all levels are available to a forklift.

Additional arms, uprights and braces can be added as storage requirements change, while single- and double-sided configurations provide maximum storage capacity – be it on a single central column, or fitting tightly against a wall.

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Light duty cantilever

Core features

- No limitation to products length
- Suited to interior installations
- Easily adjustable arm distances

Why light duty cantilever?

- There are various arm lengths available
- Fully modular, with extra sections available as you need them

The Light Duty Cantilever is ideal if you're having to store long and difficult items such as steel bars, piping, tubes or timber. Storage is horizontal so you can handle things manually or by forklift.

The Light Duty Cantilever is a versatile, modular system for storage of long goods. With no front uprights obstructing load-placing and retrieval, all levels are available for DIY, Manufacturing, Plumbing & Pipework, and workshop environments.

Additional arms, uprights and braces can be added as storage requirements change, while single- and double-sided configurations provide maximum storage capacity on a single central column, or to fit flush against a wall.

Cantilever accessories

Heavy duty cantilever -
Fixed end stopper

Welded end plates are used as a heavy duty solution for stopping the stored items from rolling off the rack.

Heavy duty cantilever -
Removable round stoppers

Preventing items from rolling off the end of the arm and can be removed for improved access to goods.

Heavy duty cantilever -
Cantilever mobile bases

Cantilever racking can be mounted on mobile bases saving space while still allowing access to individual items.

Heavy duty cantilever -
Cantilever roof, side and back cladding

A light weight roof and cladding can be added to protect the racking and goods from the elements.

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Cantilever accessories

Heavy duty cantilever - Steel grating

Can be placed on the arms and bases to make the cantilever more versatile, allowing storage of pallets, awkward shaped goods and many others.

Light duty cantilever - Removable end stopper

Removable stoppers at the end of each arm to prevent goods falling down.

Light duty cantilever - Dividers

These removable dividers can help organise and store multiple items on one level.

Light duty cantilever - Steel shelves

The Steel Shelves are available for all the standard arm lengths (by combining the two available dimensions) but only for 1000mm C/C distance between columns.

Service and maintenance

Guaranteeing ongoing safe operations means accepting your legal responsibility to ensure your storage products are regularly inspected and maintained. Our experienced teams are here to help.

Our expert teams of skilled service & maintenance inspectors can be by your side; carrying out any remedial work required and providing ongoing servicing and support of all our products within your facility.

You want to make sure your business is always operating at its safest and most efficient. We provide this assurance by:

- Offering a maintenance or service contract to your specific requirements
- Carrying out maintenance in line with your service plan
- Using certified service technicians
- Conducting systematic follow-ups of inspections and repairs
- Upgrading existing facilities with repairs or new technology
- Monitoring and following-up existing legislation, regulations & norms
- Training your staff in the use of our equipment

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Rack inspection

P90+ racking is manufactured to the highest quality and is designed to give you years of use. But racking can get damaged or misaligned, making it a danger to both your staff and your business.

The constant loading and unloading of pallets can compromise the strength, stability and integrity of any storage system which is why they need to be inspected regularly for signs of wear and tear.

Inspections can:

- Prevent damage to people or goods
- Extend the life span of facilities
- Minimise future repair costs by discovering risks early
- Offer a speedy repair service

Regular Rack inspections are not only sound business practice, they are also a legal requirement. All companies are legally obliged to ensure their employees work in a safe environment with safe equipment.

Failure to comply can cause serious personal injury and even death of operatives, reduced productivity and lead to:

- Expensive and disruptive legal proceedings
- Higher insurance premiums
- Damage to reputation

We offer annual or more regular inspections based on your requirements.

Contact us to find out more!

Consulting services

When finding the right storage solution, it's always reassuring to have an expert by your side. Our experienced and knowledgeable sales and design team give you a world-class blend of valuable insight, guidance and practical assistance.

Looking for a much more in-depth review of your warehouse or storage facility? Safer Storage Systems provides analysis, advice and ongoing support to give you just that.

Analysis & Advice

We don't just offer general advice and guidance about your storage requirements; we go further to provide you with practical assistance and advice with a more detailed analysis of your storage requirements.

Our own in-house Analysis & Simulation Tools will translate your storage needs into a specification report, evaluating all areas of your warehouse, including:

- The layout & storage equipment you require
- Your material storage locations
- The optimal material handling processes & picking speeds
- Inventory levels to achieve your required service levels
- Purchasing & replenishment strategies

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