



SELECTIVE PALLET RACKING





SAVE TIME. SAVE SPACE

AR PAL

The selective pallet racking system (AR PAL) is the most common warehouse solution. This racking system enables access to any stored good, being a flexible logistics solution, easily adjustable to the size of the stored goods and material handling equipment.

Typically designed to store palletized goods handled by fork lifts or other mechanical equipment. The forklift trucks store/retrieve the goods by moving along the aisles having direct access to any storage position

The pallets are accessed directly along structured aisles whose dimensions vary according to the forklifts. The height of the racking and the distance between the different levels will depend on storage needs, the handling equipment and available space.

AR PAL Selective Pallet Racking adapts

to material handling equipment as Wide Aisle, Very Narrow Aisle (VNA), Automated Guided Vehicles (AGV) or Autonomous Mobile Robots (AMR).

AR PAL Selective Pallet Racking are designed in accordance with the guidelines and recommendations of the Rack Manufacturers Institute (RMI), which is part of the Material Handling Industry (MHI), and of which AR Racking is a member.



WIDE RANGE

OF ACCESSORIES

GALVANISED

DIRECT AND IMMEDIATE
ACCESS



100% AUTOMATED MANUFACTURE

Advantages

- Allows you to locate each pallet quickly with **direct and immediate access**.
- Rigorous **control** over stored references, as each space corresponds to its unit load.
- Saves time and effort in the handling of goods, generating fast stock rotation.
- Ability to adapt to changing needs and possibility of storage at great height.
- The wide range of accessories allow to adapt the racking to any type of unit load, in both weight and size.
- Allows maximum utilisation of space, due to the ease and speed in adjusting the rack configuration to the warehouse requirements
- Modular structure for easy assembly. The bolted design allows a fast and easy teardown, and also the relocating or extension according to new storage needs.
- Pioneering traceability system in the racking manufacturer with the marking of beams and uprights produced in the AR Racking production center.
- The AR Racking range of uprights, diagonals and horizontals are pregalvanized.



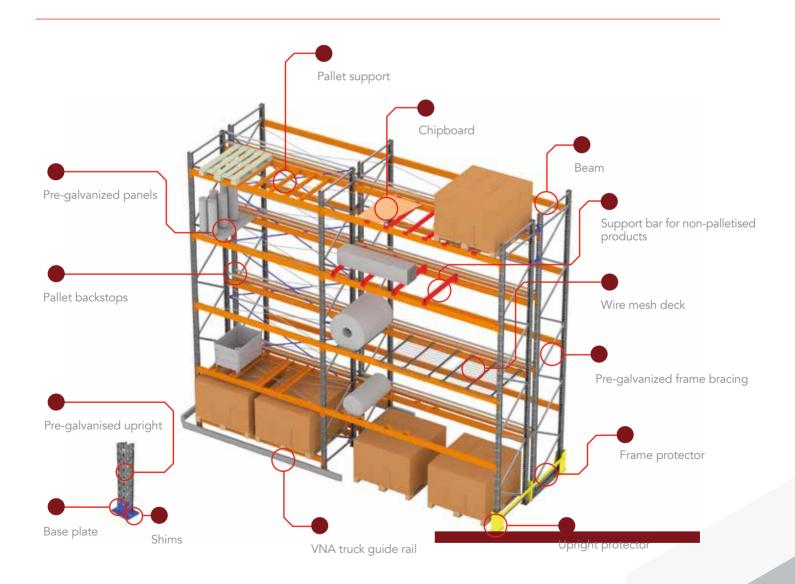




Components and accessories

AR PAL Selective Pallet Racking have a simple structure, consisting of frames, beams and accessories. This system for pallets has a wide range of accessories and components for the storage of any type of products, such as support crossbeams, support for containers, support for drums, impact protectors, etc., making this type of racking highly versatile. Discover how our AR PAL system works in this video:





Standard components FRAMES

Frames are some of the standard components of AR PAL selective Pallet Racking. These frames consist of two uprights, their appropriate horizontals and diagonals depending on the frame height, base plates and fastenings (bolts and nuts)

AR Racking has a broad range of frames with a pre-galvanized finish,

which means greater durability and resistance to adverse conditions with respect to the painted or others finishings

AR Racking has a unique treaceability system for the tracking of its uprights and beams, which enables immediate and reliable information of their design and manufacturing. Hence the traceability of the product is fully guaranteed.

The AR Racking traceability system is a step forward in the company's automation process and in its development towards the industry 4.0 concept.







Galvanized upright

The upright is the main element of the frame and is galvanised. The customer has a wide range of upright sections and lengths available.



Base plate The base plate is a structural element joined to each

upright which distributes the load over the floor and allows you to secure the

base to it.



Welded base plate The welded base plate is a component especially designed for frames of greater load and height.



Shim Element

Element situated under the base plate to level the storage system. This option is used on uneven floors.

Standard components **BEAMS**

The beams are horizontal elements, running parallel to the working aisle at several heights, that support either the unit load or the load make-up accessories.

These connectors designed by AR Racking provide an extremely safe and stiff connection between

the beam and column, increasing load capacities and making the storage system durable.

The extensive range of AR Racking beams cover many sizes, lengths and load capacities to suit each customer's specific needs. AR Racking beams have a traceability system that allows full control of their manufacturing process.

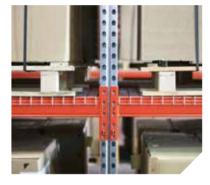
Beam for Pallets

Orange Beam

It has a wide range of lengths, widths and resistances to suit each load capacity.

Its design versatility allows you to use these beams for any type of palletised loads or for picking levels.



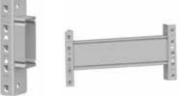


Hot Dip Galvanised Beam

Hot dip galvanised beams have a zinc bath that improves their corrosion resistance.

They are therefore suitable for very aggressive environments, as is the case in warehouses for chemicals or in very saline environments.

As with the beams, there is a broad range to suit each customer's needs.







Standard components **BEAMS**

Beam for Picking Solutions

Orange Z Beam

These types of beams are formed with a "Z" shaped profile.

This special shape allows you to create levels for manual picking systems based on an adjustable pallet racking solution, incorporating pre-galvanized panels, chipboard, wire meh decks or others.





Safety Locking Pin

Pre-galvanised standard pin

The locking pin is an individual element that is placed on the connector that joins the beam to the upright and prevents accidental displacement of the beam.

It is an approved component that enhances the safety of the structure.

It is a reliable and simple safety system that enables correct and rapid use with the naked eye.

This pin is compatible with all beams in the AR Racking range. The hot dip galvanised beams use a red locking pin to enable their control from the ground.







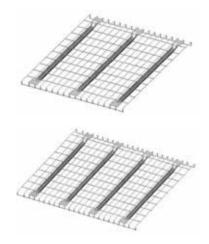


Accessories RACKS AND PANELS

Wire Mesh Deck (protection and fall-arrest)

Wire Mesh Deck are used to support the pallets or the goods stored.

The deck is placed directly on the beams and could be fixed to them if needed. Wire Mesh Decks can also be installed for picking, adapting the solution to the measurements and weights of the products required by each customer.





Pre-galvanized Panel

AR Racking's galvanized metal decks fit directly onto the beams without the need for extra accessories.

It is an AR PAL accessory used in combination with picking orange Z beams.

The decks can have a smooth or grooved surface.





Particle Board Panel

Particle board panel can be used in various ways in AR PAL racking.

They can be placed directly on the beams with the aid of retainers for easier installation adhesion.

Also, depending on the load, additional particle board panels could be placed to increase the load bearing capacity.





Accessories SUPPORT BARS AND CONTAINER SUPPORT

Pallet Support

The Pallet Support bars are structural elements fixed perpendicularly to the beams which enable the placement of pallets on them.

Pallet Supports provide an extra level of safety preventing pallets falling and ensuring the pallet resistance.





Particle Board Support

Particle board support are especially designed to place thick wooden boards or chipboards on their upper part, with the wood flush with the height of the beam.

The dimensions and thickness of the chipboard suppport vary according to project needs.





Non-palletized Support Bar

The non-palletized support (Top Hat) enables the entry of forklifts under the unit load.

Non-palletized supports are used to store goods without pallets or blocks underneath, allowing an safe and easy store and retrieval.



Container Support

Container supports are used when the unit loads to be stored are containers with legs at their ends.

They consist of a set of 2 supports fixed perpendicularly to the beams.





Accessories PALLET BACKSTOPS AND PROTECTION

Single and Double Row Pallet Backstop

Their main function is to prevent the pallet from falling in case of misaligned loading.

They consist of a metal profile set on top of 2 arms bolted to the sides of the uprights.









Double row pallet backstop

Kibi Pallet Backstop

This non-structural element is placed perpendicularly to the beams on double rows.

Its function is to also warn and prevent the pallet from falling in case of misaligned loading.





Floor Pallet Backstop

The floor pallet backstops are different to the other backstops.

They are fixed to the floor to serve as a warning and to retain unit loads placed on the floor. They can be either single or double.



Single floor backstop



Double floor backstop

Fall Protection Options

Fall protection options prevents goods falling from the rack in both rear and sides.

They are a safety element that prevent unwanted displacement or falling of the unit loads.

They can be either nylon or metal. The flexibility of the nylon type mesh enables it to fully recover its original state after any incident.



Nylon mesh



Metal mesh

Accessories PROTECTORS

Column Protector

They are installed on eon each aisle side upright of the racking system Their function is to protect the upright from any damages caused by impacts of the material handling equipment.

There are several models to suit several requirements.





Corner Column Protector

Corner protectors are an alternative option when it is not possible to install upright protectors.

Their design can either be solid or striped, according to needs.





Upright Reinforcement Protector

Upright reinforcement protectors are used in installations in which the upright must be protected at a height that is higher than that reached by the upright protector.

They can be either sheet metal or plastic, and both are fixed to the upright itself.



Side Frame Protector

Side frame protector protect the frames for damages due to impacts for the material handling equipment. They are made up of two upright or corner protectors and a steel bar or wooden board.

These "C" shaped protections are placed on the outer frames, where impacts are more common. They are normally coupled to the upright protectors for greater effectiveness.

There are also side wood protectors, which serve the same purpose.



Accessories SPECIFIC SOLUTIONS

Drum/Barrell Support

The AR Racking supports for drum/barrell fit directly on the beams.

Their function naturally is to facilitate the storage of special cylindrical loads, mainly drums.

They consist of a set of 2 elements that are fitted into the beams to support the front and rear of the drum.

This adapted support allows you to handle the loads while stored in complete safety.





Coil/Reel Support

The coil/reel supports enable the simple storage of any material wounded on coils or reels (cable, rope, cloth, etc.).

The coil/reel axle is supported by two supports fixed to the adjacent uprights allowing rotation.



Accessories SIGNS

Markers

Markers are rectangular metal plates that are placed on the external parts of the racking to indicate with letters and numbers the different aisles of the installation.

The plate is fixed to the upright in different ways as required.



Load Warning Notice

The load warning notice is a component fixed in visible places of the structure to provide personnel with information for the safe use of the storage system.

It is normally fixed to the outer frames of the installation.

The following appears on the warning notice: safety warnings, reference to the storage system, load capacities and manufacturer and distributor contact information.

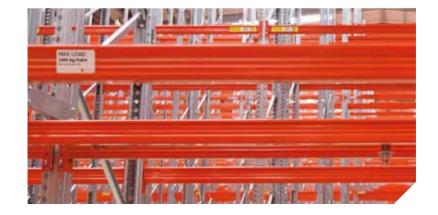




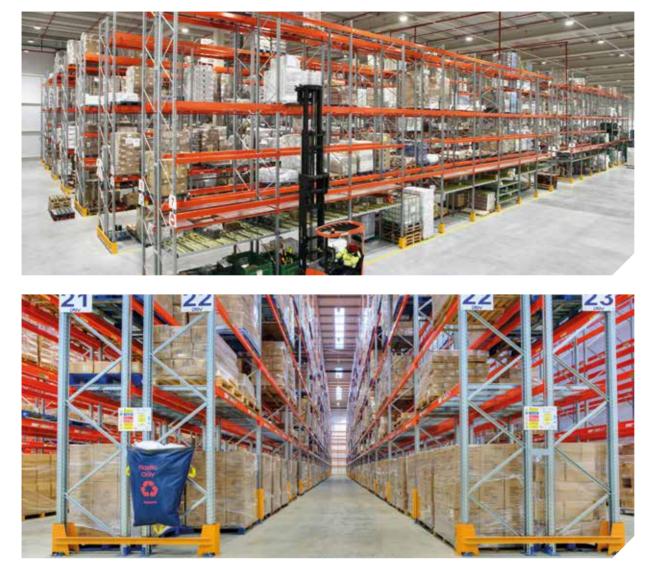
Vinyl Beam Load Sticker

The vinyl beam load sticker is an identifier indicating the load capacity of each beam. This helps ensure safe use of the storage system, reducing risks and any confusion

when loading and unloading. The vinyl beam load sticker is an adhesive that is placed directly on the beam.











WHY CHOOSE AR RACKING?

At AR Racking we are committed to offering high-quality assured storage solutions to our customers, providing a comprehensive service throughout the whole process with the main objective of achieving the full satisfaction of our customers by solving their storage needs.

All this is possible thanks to our automated and state-of-the-art facilities, and highly qualified personnel.

Whether your business is small-scale or industrial, AR PAL can be adapted to meet your unique storage demands.



- 100% Automated production center
- Corrosion-resistant galvanized product
- Traceability system



- 5 Year guarantee in AR Racking storage systems
- Quality assurance guaranteed by American standards
- Grupo Arania, with more than 80 years of experience



- Planning, design, manufacturing and installation
- Specialised international customer service
- Efficient delivery dates



- Customers from more than 60 countries
- More than 100 satisfied international distributors
- Control of and improved customer satisfaction







INNOVATION AS A MATTER OF PRINCIPLE

AR Racking designs and manufactures highperformance racking, complying with the most rigorous American standards. Continuous improvement and adaptation to changes are a vital part of the company's philosophy, identifying market needs and incorporating them into the different products from the start.

AR Racking's industrial experience has broadened through continuous development plans implemented in every link of its production chain: from product design and production through to final installation and maintenance.

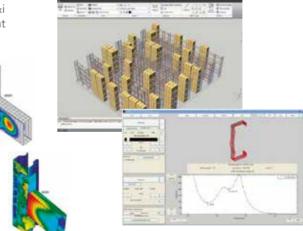
Our approach is simple: we always propose a unique, outstanding and innovative offer, and incorporate all the details needed to offer the best project and specific advice for any requirement.



R&D&i DEPARTMENT

AR Racking has a technology centre dedicated exclusively to R&D&i activities, as well as an advanced engineering projects development area, which allows us to respond appropriately to more demanding logistical requirements.

The AR Racking technical area continuously tests and analyzes products and materials to improve their performance; it simulates, calculates and researches (with specialized software) the effectiveness of the geometries, and makes full structural calculations on the behavior of systems already installed in different situations.



STATE-OF-THE-ART PRODUCTION CENTER

We have a 376,736 ft² production center in Tudela, Navarra (Spain), equipped with the most advanced technology. The production process is fully automated: it incorporates latest generation profiling machines with continuous cutting process and laser measurement control, welding centers, painting and packaging processes, all fully automated, guaranteeing the highest quality parameters.







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