SMART WAREHOUSING SOLUTIONS

A solution for every need







BOOST YOUR WAREHOUSE EFFICIENCY WITH SMART SPACE MANAGEMENT







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CONVENTIONAL PALLET RACKING

Optimised solution for warehouses containing palletised goods and a wide variety of SKUs.



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» Direct access to every single product.

» Easy stock control: each storage slot holds one pallet.

» Adaptable to any space, weight or size of goods.

» Double-deep racks can be installed to increase storage capacity.



INNOVATIVE SAFETY LOCKING SYSTEM THAT PREVENTS ACCIDENTAL OR DELIBERATE MOVEMENT OF THE BEAM.

DRIVE-IN RACKING

Ideal for managing many products of the same SKU.



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» Maximum **utilisation of available space**, both surface area and height (up to 85%).

» Excellent for homogeneous products with many pallets per SKU.

» No aisles between the racks.

» Perfect for freezer rooms requiring full use of available storage space.



CAN BE USED WITH EITHER LIFO (LAST IN, FIRST OUT) OR FIFO (FIRST IN, FIRST OUT) WITH BATCHES WHEN THERE ARE MORE THAN THREE LANES PER SKU.

PALLET SHUTTLE SYSTEM

Optimised storage capacity: an electric shuttle moves inside the channels, inserting and removing pallets autonomously.



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- » Compact, high capacity system: storage of up to 40 m deep.
- » High productivity: increased flow of pallets/hour.
- » Greater diversification: one SKU per storage channel.
- » Maximum safety: less damage and fewer accidents.



PERFECT FOR STORING CONSUMER PRODUCTS WITH A HIGH PALLET TURNOVER RATE.

LIVE PALLET RACKING

Pallets accumulate in the storage channels by gravity, compacting space and ensuring agile management.



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» Perfect pallet turnover with the FIFO method: the first pallet in is the first pallet out.

» Ideal system for perishable products.

» Savings in space and time when handling pallets.

» Optimal use of surface area. Up to 30 pallets deep per channel.



UNINTERRUPTED FLOWS: NO INTERFERENCE BETWEEN LOADING AND UNLOADING OPERATIONS BY DESIGNATING A DIFFERENT AISLE FOR EACH TASK.

PUSH-BACK RACKING

Maximised available space with high accessibility and agility in goods handling.



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- » Excellent use of space: up to four pallets deep.
- » LIFO method: loading and unloading are carried out from the same side.
- » Suitable for medium-turnover products.
- » Each channel can be used to store a different SKU.
- » Reduced times for loading and unloading operations.



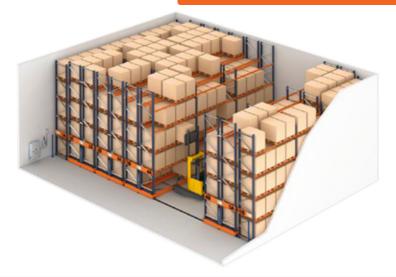
AGILITY AND SAFETY IN OPERATIONS: FORKLIFTS DO NOT HAVE TO ENTER THE RACKS AND ONLY WORK FROM ONE AISLE.

MOVIRACK MOBILE RACKING

Maximise your storage capacity with racking installed on mobile bases.



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» Direct access to each pallet.

» With only **one working aisle needed for access**, the mobile bases free up storage space by compacting the goods and can even multiply the capacity of the space.

» Suitable for **cold storage** or freezer warehouses due to the lower energy consumption per pallet stored.



OPTIMUM SAFETY: THE RACKING IS EQUIPPED WITH NUMEROUS SAFETY DEVICES DESIGNED TO PROTECT OPERATORS AND GOODS.

CLAD-RACK WAREHOUSES

The best solution for high-bay storage with maximum use of the available surface area.



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» Space optimisation: storage area is increased by eliminating intermediary pillars.
 » Quick implementation with minimal construction: the racks themselves form the building structure.

» High performance warehouses that can incorporate different degrees of automation.

» Ideal for freezer or cold stores.

» Both automated and standard systems can be implemented.



MAXIMUM CONSTRUCTION HEIGHT: CLAD-RACK WAREHOUSES CAN BE BUILT FROM AS LITTLE AS 12 M UP TO 45 M HIGH.

AUTOMATED STORAGE AND RETRIEVAL SYSTEMS (AS/RS) FOR PALLETS

Boost warehouse productivity by automatically depositing/ removing pallets from the racking.





- » Raised productivity in goods inflows and outflows.
- » Elimination of errors arising from manual management.
- » Inventory controlled and updated in real time.
- » High profitability due to lower labour and maintenance costs.
- » Space maximisation.
- » Load safety.



OPTIMISED PRODUCT ENTRY, PLACEMENT AND EXIT FUNCTIONS CONTROLLED BY THE WAREHOUSE MANAGEMENT SYSTEM (WMS).

AUTOMATED PALLET SHUTTLE

All the advantages of compact storage and automation.

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- **» Maximum capacity** with storage channels up to 40 m deep and racking over 40 m tall.
- » Raised productivity by increasing the number of pallet cycles/hour.
- » Automated management. Error elimination.
- » Lower labour and energy costs and less floor space used.
- » Reduced risk of accidents and total control of goods.

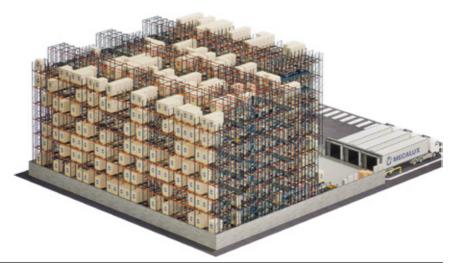


IN COMBINATION WITH STACKER CRANES, THE PALLET SHUTTLE SYSTEM CAN REACH A STORAGE HEIGHT OF UP TO 40 M.

AUTOMATED 3D PALLET SHUTTLE

High-density pallet storage featuring autonomous multi-directional shuttles to maximise capacity.

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» High throughput thanks to the speed and operational versatility of the shuttle cars.

» Great flexibility: the shuttles can change levels and operate simultaneously with other shuttle vehicles in the same aisle.

» Maximum utilisation of available space.

» Intelligent operation of the shuttles through fleet management software that controls traffic and optimises their routes.

» Scalable solution: additional cars can be incorporated to boost productivity.



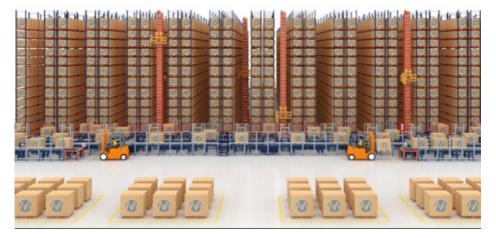
THE SYSTEM PROVIDES SIGNIFICANT ENERGY SAVINGS IN COLD-STORAGE WAREHOUSES.

AUTOMATIC TRILATERAL STACKER CRANES

Perfect solution for automating conventional racking up to 15 m tall without altering the warehouse structure.



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- » Economical automation with a rapid return on investment.
- » Maximum use of locations: pallets can be picked from floor level.
- » Reduced operating costs.
- » Improved **safety** in the facility.
- » Low maintenance costs.

» Integrated trilateral extraction system: a rotating head picks and stores pallets in three positions.



EASY TO IMPLEMENT IN BOTH NEW AND EXISTING FACILITIES, AS THE WAREHOUSE STRUCTURE DOES NOT REQUIRE MODIFICATION.

PALLET CONVEYOR SYSTEMS

Automation of internal goods transport, optimising flows and boosting productivity.





» Reliability in continuous flows of products.

» Fewer accidents and errors compared to manual transport.

» Wide range of components for different combinations and circuits.



MAXIMUM STANDARDISATION OF MEASUREMENTS AND COMPONENTS TO MAKE PRODUCTION EASIER AND LOWER COSTS.

MINILOAD SYSTEMS

Perfect for box storage and picking operations using the goods-to-person concept.



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- » Complete automation of entries and exits.
- » Great productivity.
- » Maximum use of available space.
- » Elimination of errors stemming from manual management.
- » Real-time inventory.
- » Excellent storing small loads.





INTEGRATES THE RACKING, STACKER CRANE AND WAREHOUSE MANAGEMENT SYSTEM ROLLED INTO ONE.

SHUTTLE SYSTEM FOR BOXES

For increasing storage density, order picking speed and, thus, productivity.



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» Continuous flow and operations 24/7.

» Maximum speed in goods entries and exits.

» **High** number of movements/hour.

» Modular and scalable based on logistics needs.

» Optimisation of available surface space to expand storage capacity.

» Easy maintenance without the need to completely stop the operation of the system.



ADAPTABLE TO DIFFERENT UNIT LOADS: PLASTIC OR CARDBOARD BOXES AND METAL TRAYS OF MULTIPLE SIZES.

HIGH-PERFORMANCE PICK STATION

Preparation of a large number of orders: up to 1,000 picks/hour



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» Speed and productivity for businesses that manage a high number of orders.

» Possibility of preparing up to 6 orders simultaneously.

» Ergonomic system that adapts to the height of the operator.

» Elimination of errors thanks to the warehouse management software's instructions.



PICK-TO-LIGHT SYSTEMS STREAMLINE ORDER PICKING AND AVOID ERRORS DUE TO MANUAL HANDLING.

PICKING ROBOT

Robotic system that uses artificial intelligence to automate order picking and increase productivity.



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» Ability to operate continuously, 24/7.

» Possibility to work autonomously or with operators.

» Maximum reliability in the picking process thanks to the vision system and artificial intelligence.

» Operational safety: the cobot is capable of moderating its speed when it detects any presence in its vicinity.

» Compatible with multiple automated storage solutions.



FLEXIBLE SYSTEM CAPABLE OF HANDLING A WIDE RANGE OF ITEMS OF DIFFERENT DIMENSIONS, MATERIALS AND SHAPES.

BOX CONVEYOR SYSTEMS

For increased speed in moving and handling boxes and light loads in the warehouse.





- » Improved **communication** between different areas or levels.
- » Possibility to span long distances.
- » Ability to sort orders.
- » Essential for any automated process.
- » Can be **combined** with any other storage system.
- » Easy maintenance.

AUTONOMOUS MOBILE ROBOTS (AMRs)

Autonomous internal goods transport system that adapts its route in real time.



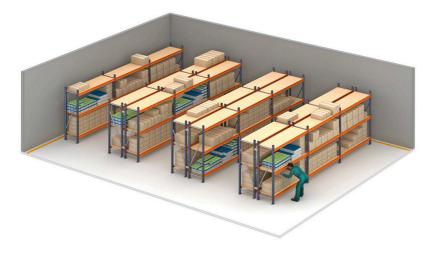


- » Autonomous movement of boxes, pallets and shelves in the warehouse.
- » Swift implementation, no infrastructure costs.
- » Accuracy and safety in task execution.
- » Flexibility in picking processes.
- » Easy integration with other systems operating in the facility.

METAL SHELVING FOR MANUAL PICKING

Economical, efficient solution for manual storage of medium and heavy loads.

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» Great strength and versatility.

» Ideal for diverse SKUs and split turnover.

» Multiple accessories for storing products of particular shapes: tyres, clothing, spare parts, etc.

» Gangways can be installed to leverage the height of the warehouse.



WITH NARROW AISLE HANDLING EQUIPMENT, THESE SHELVES CAN BE UP TO 20 M TALL.



Basic manual storage and archiving system for light and medium loads: up to 200 kg per level.





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» High-quality finishes that adapt to all types of environments, from warehouses to offices and garages.

» Easily assembled and scalable.

» Wide range of accessories: additional modules, vertical dividers, book dividers, metal doors, plastic drawers, etc.



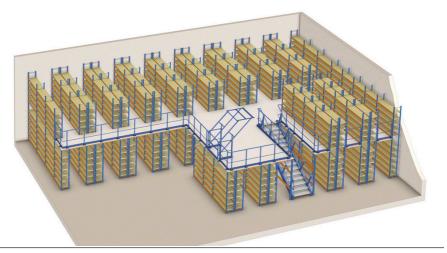
THE QUALITY OF THE MATERIALS USED ENSURES THE STRENGTH AND DURABILITY OF THE RACKING.

PICK MODULES

Ideal for e-commerce warehouses with intensive order processing: they divide order picking into different sections by levels.



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» Maximum use of vertical space.

» Flawless management of stored materials.

» Multiple configurations adaptable to each operation.

» Storage of different load types: from small parts and individual items to packages and boxes.

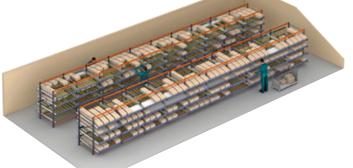


PICK MODULES CAN BE COMBINED WITH AUTOMATIC LIFTS OR CONVEYORS TO STREAMLINE MOVEMENTS BETWEEN LEVELS.

CARTON LIVE STORAGE

Boost efficiency in order picking, minimising travel in the warehouse.





» Optimal product turnover (FIFO method: the first box in is the first box out).

» Greater **number of SKUs** in the front part of the racks.

» No interference in replenishment and picking operations.

» Pick-to-light systems speed up order picking and minimise errors.

MESH PARTITIONING AND ENCLOSURES

Ensure protection of operators, goods and machinery in warehouses and production centres.





» Modular, adjustable system for any area requiring partitioning.

» Quick and simple assembly.

» Easy to **expand** and modify at any time.

» Design and installation meet workplace safety regulations.

CANTILEVER RACKING

Designed to store long or variable length unit loads.



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» For **unit loads** such as metal profiles, pipes, moulding, wooden boards, metal or plastic sheets, etc.

» Levels can be placed on **one or both sides** of the structure.

» Extremely simple, sturdy structure.

» Features all the necessary elements for outdoor installation.



THESE RACKS CAN BE INSTALLED ON MOBILE BASES TO INCREASE STORAGE CAPACITY.

INDUSTRIAL MEZZANINE FLOORS

Simplest, most economical and versatile solution for making the most of the height of the warehouse space.

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» Greater storage capacity by adding one or more additional floors.

» Easy, quick assembly.

» Adaptable to any requirement due to the wide variety of sizes, floor types, construction systems, etc.

» Can be fully **dismantled** and reused.

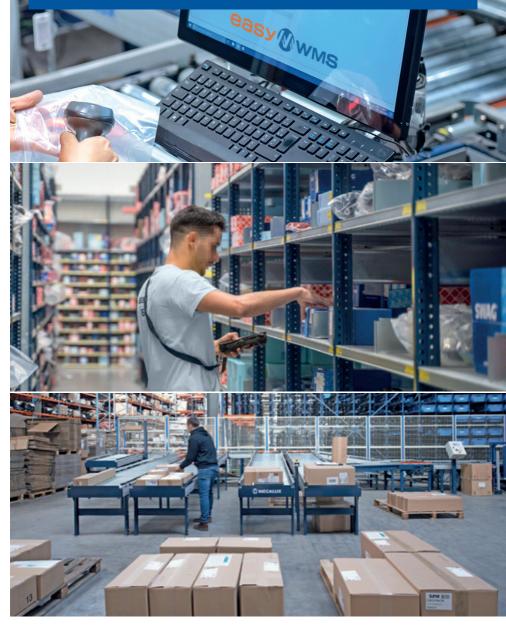
» Possible to use in **combination** with conveyors and automatic lifts.



MULTIPLE FINISHES AND CONFIGURATIONS ADAPTABLE TO ANY TYPE OF PRODUCT, WAREHOUSE OR LOGISTICS OPERATION.

EASY WMS WAREHOUSE MANAGEMENT SYSTEM

The logistics software created by warehousing experts.



Easy WMS is a powerful, versatile and flexible warehouse management system. It controls and optimises all movements and operations that take place in a facility, eliminating errors and reducing logistics costs.

Easy WMS manages a manually operated warehouse (using RF scanners) with the same efficiency as an automated facility or an online shop, thanks to its WMS for Ecommerce module.



- » Adaptation to **e-commerce**.
- » Error elimination.



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EASY WMS MAXIMISES WAREHOUSE OPERATIONS AND PRODUCTIVITY

The software sends instructions directly to the operators, who work faster knowing what to do and where to go at any given time.



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Easy WMS in the cloud

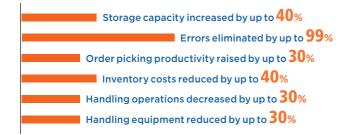
» Lower initial investment - no need to purchase servers.

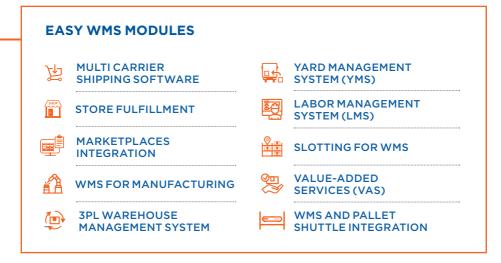
» Faster, simpler implementation.

» Easy, cost-effective maintenance. Completely secure with Microsoft Azure.

- » Software version up-to-date at all times.
- » Always available to ensure business continuity.

BENEFITS GAINED WITH EASY WMS





Our solutions are certified by:

ORACLE



Partner

Microsoft Partner





TECHNICAL INSPECTION OF RACKING SYSTEMS

Standard UNE-EN 15635 requires an annual inspection of your installation by qualified external personnel.



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The objective of this inspection is to:

» Improve safety in your warehouse.

» Reduce risks.

Mecalux has been offering this technical inspection service to its customers for over 25 years to enhance the safety and efficiency of their logistics facilities.

The condition of the warehouse will be certified with a label placed on the safe load warning notice, indicating the date of the next inspection.



OUR TECHNICIANS PERFORM A RIGOROUS INSPECTION OF THE INSTALLATION, CHECKING THE CONDITION OF THE RACKING AND SHELVING AND OF THE WAREHOUSE IN GENERAL.

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Feel free to get in touch with your local branch office

MECALUX, SA - HEAD OFFICE

Silici, 1 - 08940 Cornellà de Llobregat Barcelona (SPAIN) Tel. +34 932 616 913



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