



**Cantilever Racks**

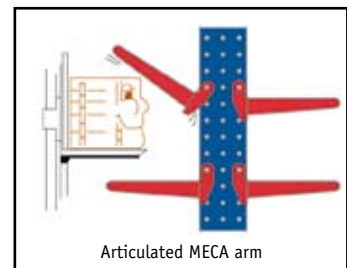
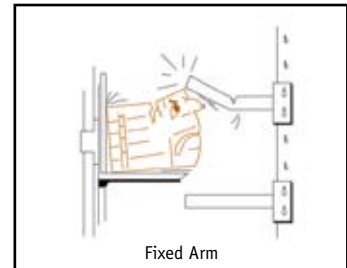
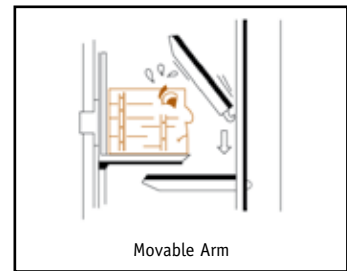


### What is a Cantilever Rack?

The Cantilever system is optimal for the storage of long and bulky materials; profiles, pipes, timber, mouldings, etc.. because no structural part interferes with the handling of the goods no matter how long they are.

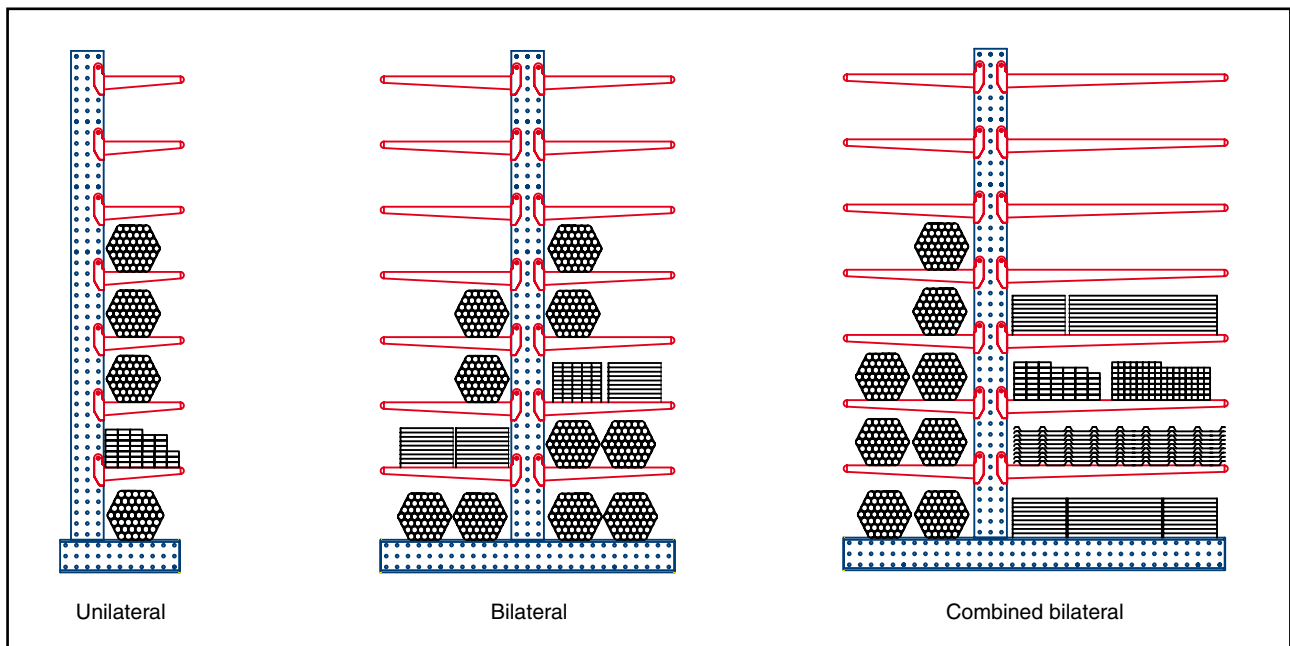
The Cantilever system is made with metallic pillars with horizontal arms adjustable in height.

This direct access to the storage unit and the easy adjustment of the height of the load level make this system very versatile in front of the volumetric changes of the goods to be stored.









### Unilateral and Bilateral MECA Flexibility

The MECA **Cantilever** System is available either single sided or double sided with different dimensions.

We have a large range of arm and base lengths which gives our system more flexibility and suitability all types of applications whether they be large or small.





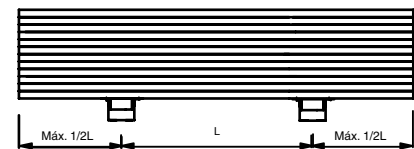
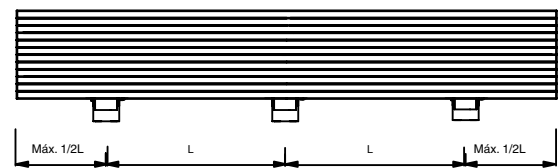


### Load distribution

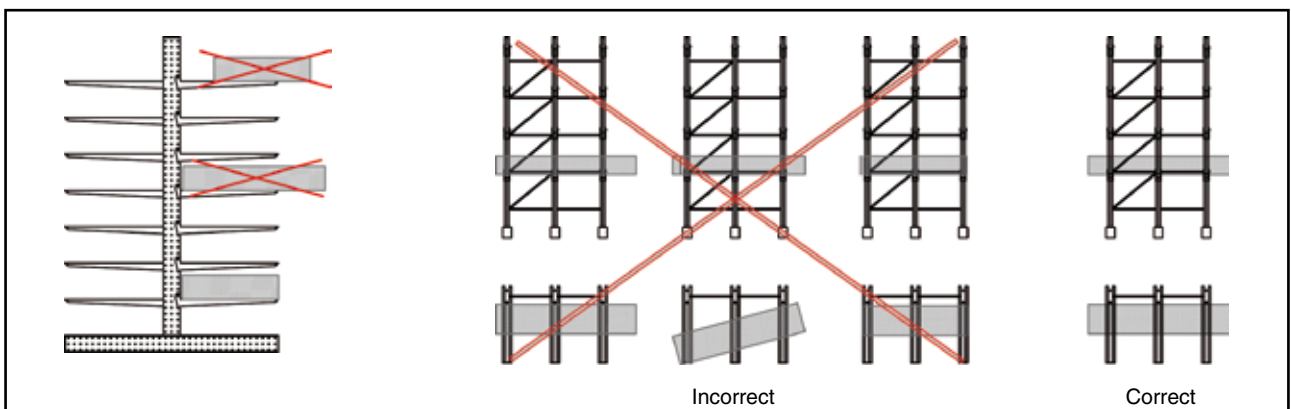
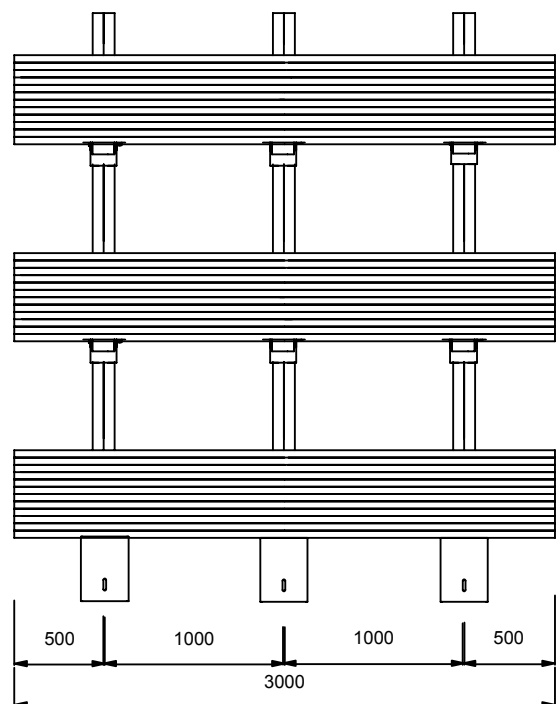
The load unit distribution on the **Cantilever** racks must be even as on every other type of rack but with the special feature that the load must hang at both ends instead of remaining within the limits of the rack

The load unit can be supported by various arms to avoid deformations of the material. A minimum of 2 arms are needed.

This peculiarity means that the unit load has a balanced support and gives more stability to the rack.



Example







### Constructive systems

Meca-System has a great range of **Cantilever** racks for different products and situations, all of them with easy adjustable levels in height to absorb the volumetric changes of the load

#### Light Cantilever

It is perfect for hand loading with height up to 3 metres.

Possibility of mezzanine floors.

Forklift usage is not recommended



#### Medium Cantilever

For medium loads.

Possibility of using forklifts.

With level depth from 300 to 1200 mm height up to 4500 mm



#### Big load Cantilever

For bulky or/and heavy materials and self cladding or high buildings; up to 13500 mm high.







### Cantilever System for timber industry

All timber products for the timber industry like to be stored in a dry ventilated area. Block stacking should only be done as a last resort and mainly a thing of the past. The down side of block stacking is many, timber can't breathe, induces mould and bending that results in stock rejects in the market.

Only the ***cantilever*** system can handle the variety of load lengths and weights experienced in the timber industry.

The ***MECA Cantilever*** System minimise damage, speed up handling and maximise your profits

Optimal for all the products in the sector: boards, panels, beams, worktops, moulds, etc...









### Cantilever System for timber industry

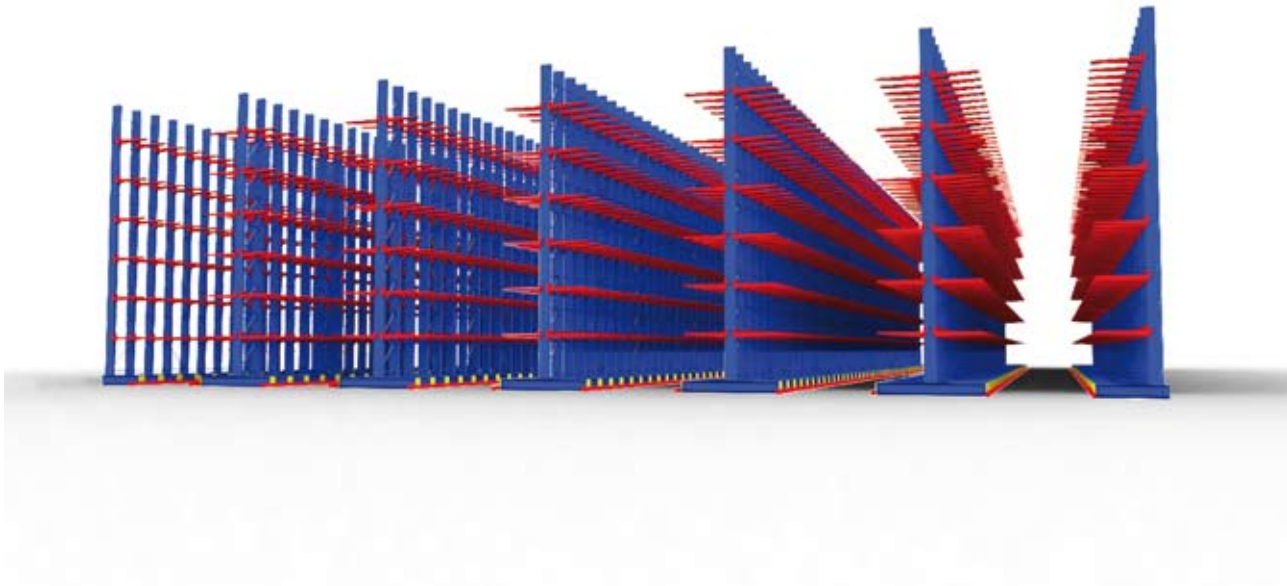








### Cantilever System for timber industry





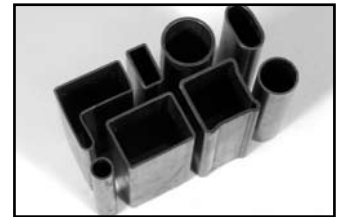


### Cantilever Systems for Various Sectors

The MECA **cantilever** rack was originally designed to solve the storage problems of the timber industry. The flexibility and constructive versatility of the MECA **Cantilever** rack has allowed the successful usage in many other areas.

Materials such as Aluminium profiles, pipes, plasterboards or plastic coils which used to be block stocked or stored at low heights now experiment a new level of flexibility and order with amazingly satisfactory results for the warehouses as well as for the final customer:

- Increase of storage capacity
- More efficiency in logistics
- Less product damage.









### Cantilever Systems for Various Sectors





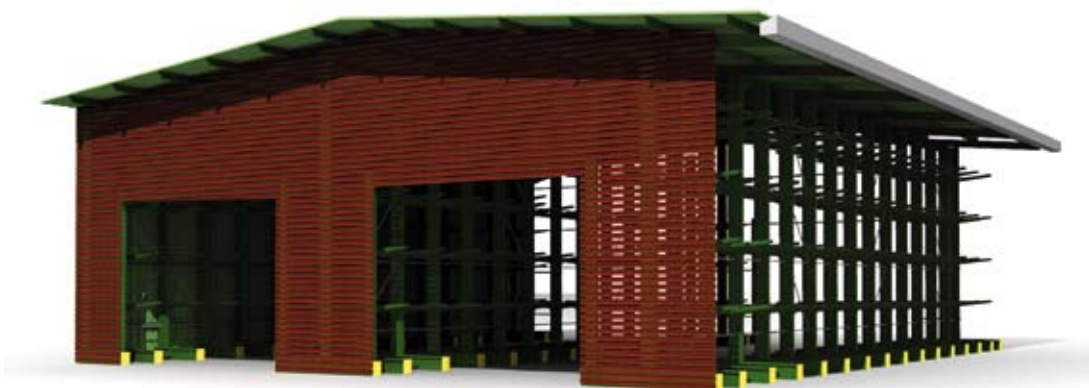


### Self cladding buildings External Racks

The Meca self cladding buildings lead to a cost reduction. The racks also support roof and walls, saving the steel structure of a conventional warehouse and tax advantages in front of traditional building investments.

This sort of construction leads also to a quicker execution of the project.

We have different types of cladding according to the customer's needs: Roofed racks, partial or total cladding.









### Self cladding buildings External Racks



Possibility of external racks installation when the type of product or the site locations require it.



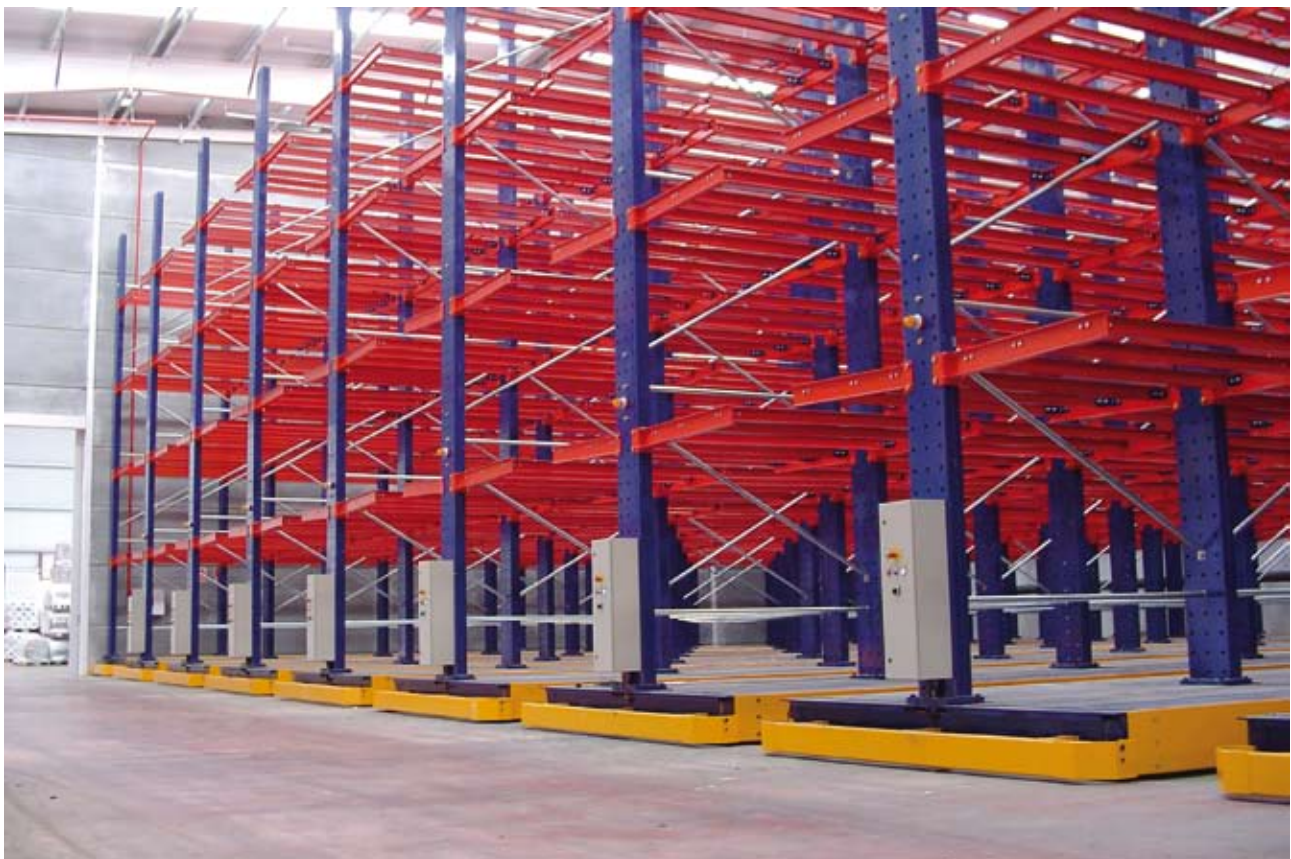


## Dynamic Racks

The dynamic rack system allows the optimal usage of the space coupled with direct access to the stored goods

The Meca dynamic system guarantees quickness when opening and closing the aisles and with noticeable smoothness too.

The difference in the initial cost in front of static systems is quickly amortized by the space saving and the increase of the storage capacity.



### Accessoires

#### Forklift Guide Rail

The MECA Cantilever racks combined with all-directional lift trucks will enable you to store safely goods up to 13.5 mm long.

To improve the space usage of you warehouse, faster and safer stock turnover on the racks, we recommend MECA guide rails.

Depending on the size and weight of the directional forklift to use we install profiles UPN120/140 for forklift for 1.5 to 2 Tones and profiles UPN 160/180 strengthened for forklift for more than 3 Tones.

The MECA guide rails are designed for a perfect guidance of the forklift as well as for a strong protection of the rack.





## Load pin retainers

To avoid slid and drop material from the rack.  
Perfect system for half packs without straps;  
e.g. Pipes.



## Continuous shelf system

When there aren't homogeneous load units this is the best system to gain a continuous shelf of storage obstacle free of obstacles.





### Quality

Meca-System follows a constant plough back policy in human resources and technical innovation to improve materials, products, services, processes and working systems.

All our effort and dedication is focused on catering for our customer's needs and prospects. Offer the best service with a product in vanguard of the top exigencies of the market.

The choice of one or other steel type for the fabrication of the different components of a Cantilever rack depends directly on the requirements and structural exigencies of every specific installation.

They usually are:

- Useful warehouse height
- Type of forklift (traditional/all directional)
- Material to store
- Distance between pillar supports
- Load levels
- Aisle width

Due to the wide range of products and qualities existing in the market, we use different types of steel with elastic limits values between 500 N/mm<sup>2</sup> (micro-alloyed steel S500 MC as per EN 10149), going through 355 N/mm<sup>2</sup> (micro-alloyed steel S355 MC as per EN 10149), and 275 N/mm<sup>2</sup> (S275 JR as per 10025), all of them collected in the document 10.2.07 of the usage recommendations of EMF (European Maintenance Federation).

Our hardware is quality 8.8 according to DIN-267



## Finishing



RAL 5003  
Columns and bases



RAL 3000  
Arms and rails



RAL 1028  
Front base plate



RAL 6005  
External

### Powder Paint

It consists of a new and modern installation for the painting of the cantilever columns up to 13.50 mm in a single piece

It is a totally automatic process for the surface coating treatment of our products.

The installation is compounded by a series of steps which lead to an excellent surface finishing to be able to cater for the most exigent market.

### Powder Painting Process

- Physical-Chemical hot degreasing
- Micro-crystal phosphatising to increase the pre-treatment protection, before the paint
- Cleaning with deionised water
- Piece drying. The drying process is made in an oven where the materials stay for 10-12 minutes at 110°C to let them ready for the painting process.
- Powder paint. The painting process is made with a powder paint dissolvent free and toxic chemical free. 12 painting robots are in charge of the process. We use EPOXY-POLYESTER paint of 90 microns
- Polymerising. After the painting the materials have the powder stuck to the surface through an electrostatic field. After the piece is heated for 15-20 min at 210° then the powder melts and the shining of the paint appears.
- Cooling. Once the polymerising is finish the piece goes out of the oven and goes to the cooling lung for 10 min being then ready to be packed.



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