

# Enova

*The strength of simplicity*

TORNVIG CHRISTENSEN  
**MASKINER** A/S



Dear customer:

We are very proud of showing you our product catalogue, in which you can find the best solutions to organize and administrate offices, warehouses and workshops.

The products here offered are supported by an industrial organization that owns the most advanced technologies on design and production.

All raw materials used in our productive processes are manufactured and developed in the UE and they satisfy the most demanding quality regulations, calculation codes, they respect the environment and assure industrial safety.

The trust our customers have placed in us has allowed Esnova despite the economical crisis to experiment a significant increase of our annual turnover which evidences that is possible to compete in this business with products manufactured in Europe when we combined technology, innovation and service.

Our Account Managers are always at your disposal to establish a direct relationship, quicker and more efficient as these days require.

We hope that our products will be of your interest,

Sincerely,



Marco Antonio Fernández Alonso  
CEO Esnova Racks S.A.



Esnova Racks S.A. Head office and Manufacturing Plant - 46.600 m<sup>2</sup>

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## STORAGE

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## Innovation

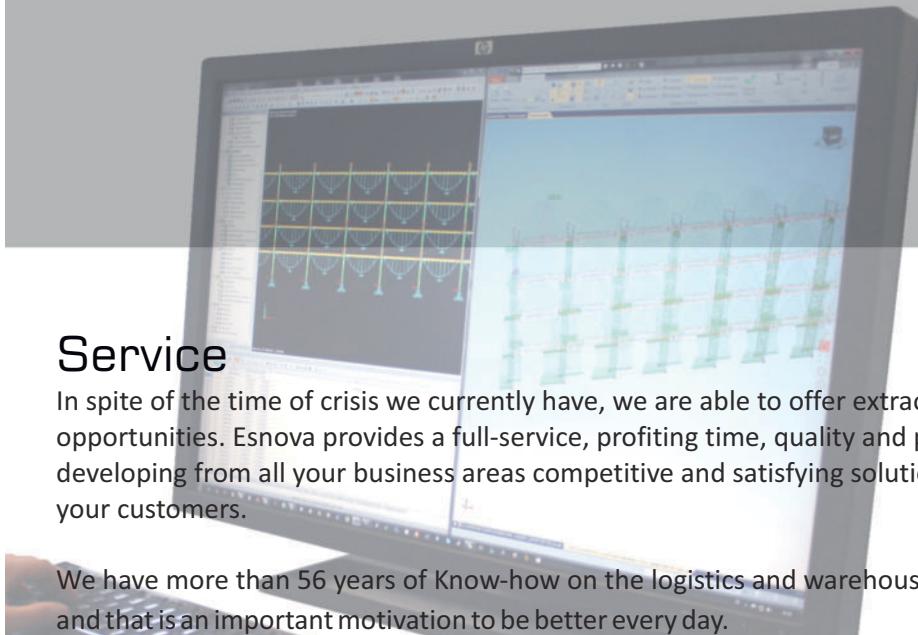
Innovation to develop new products and optimizing the existing ones.



## Technology

Our machinery at your disposal.

We are equipped with the most flexible and advanced production systems.



## Service

In spite of the time of crisis we currently have, we are able to offer extraordinary opportunities. Esnova provides a full-service, profiting time, quality and price; developing from all your business areas competitive and satisfying solutions for your customers.

We have more than 56 years of Know-how on the logistics and warehousing areas and that is an important motivation to be better every day.

**Esnova** makes exports to 38 countries worldwide.



Angola · Austria · **Belgium** · Czech Republic

Denmark · Dominican Republic · France

Germany · Guatemala · Ireland · Malta · Morocco · Norway

Panama · Portugal · Uruguay · El Salvador · Switzerland

The Netherlands · United States of America

United Kingdom · Slovakia · Saudi Arabia · Poland

· Qatar · Omán · Emirates

Bahrein · Kuwait · Jordania · Egypt · Honduras

Indonesian · Colombia · Mexico · Cuba · Hungary · Israel



## Quality

Quality as a priority standard is established on each and every process Esnova develops.

The group invests in quality and safety and also promotes environmental respect.

- Quality management system certification (ISO 9001).
- Environmental management system certification (ISO 14001).
- Occupational health and safety management system certification (OHSAS 18001).
- CE marking certification acc. UNE EN 1090.

- Member of the European Federation of Material Handling FEM/AEM.

# Products

**BOLTLESS SHELVING SYSTEM (Pg. 10 - 19)**



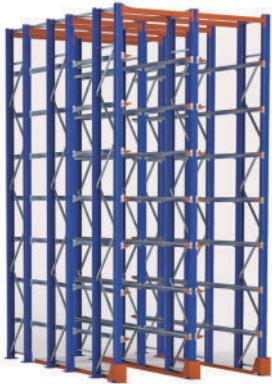
**WIDE SPAN SHELVING M66 (Pg. 20)**



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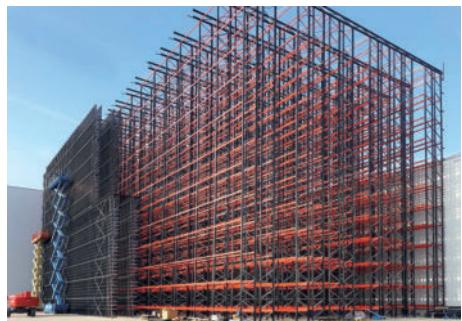
**MOBILE PALLET RACKING** (Pag. 30)



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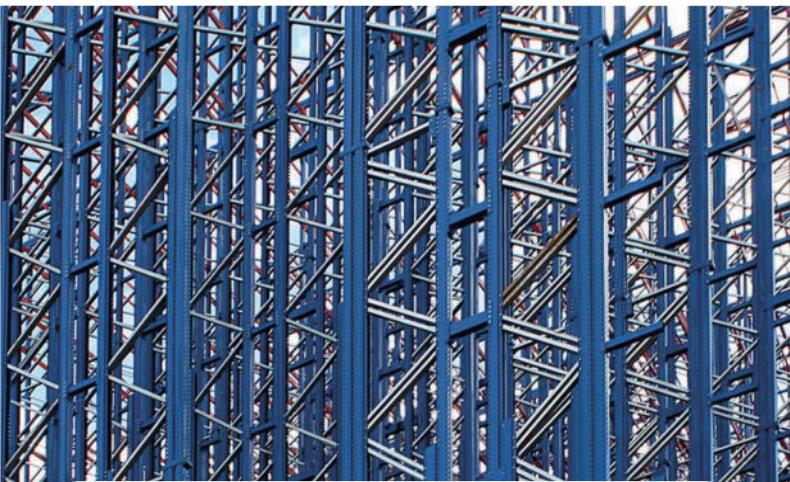
**ESNOVA SOFTWARE** (Pag. 34)





- Our Technical Department is at your entire disposal to satisfy all the storage needs of our customers.
- We study your particular case and give you the best solution adapted to your needs.
- Storage system calculations for areas with seismic risk.

*Ask for our product catalogue:*



□ We have a **testing laboratory** where load testing, strength, buckling, etc are performed.



*Enova*

**THE STRENGTH OF SIMPLICITY**

# Low cost boltless shelving for small size loads

**Riveto® 2** *light*



## Sistema **Riveto**

Assembly with deep-drawings,  
NO BOLTS, NO RIVETS.

Easy assembly.  
A rubber mallet or a nylon  
head one is all you need.



### STANDARD COLOURS

#### UPRIGHTS



Blue  
5019



Brown  
8017



Pregalvanized

#### BEAM / CROSSBEAM



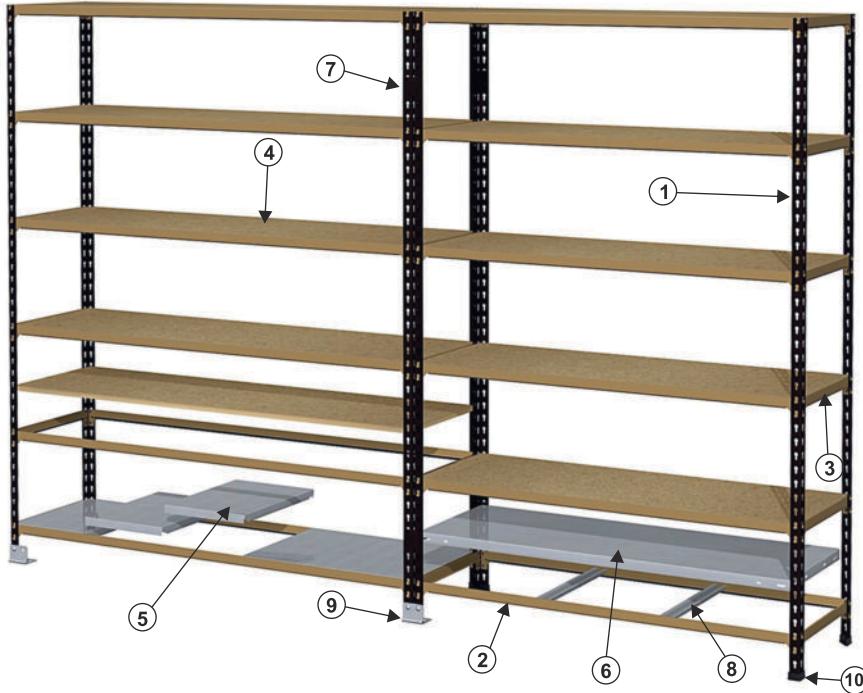
Brown  
8024



Grey  
7032



Pregalvanized

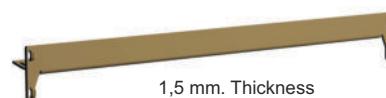


**① UPRIGHT R3 / R3Z**  
1,5 mm. Thickness

1.981 mm.
2.438 mm.



**② BEAM V3 / V3Z**



V3/12	304 mm.
V3/15	381 mm.
V3/18	456 mm.
V3/24	609 mm.
V3/36	914 mm.
V3/48	1219 mm.

**③ CROSSBEAM V3**

V3/12	304 mm.
V3/15	381 mm.
V3/18	456 mm.
V3/24	609 mm.



1,5 mm. Thickness

**④ CHIPBOARD PANEL AGL**



16 mm. Thickness

**⑤ STEEL PANEL R3**



**⑥ STEEL SHELF S2**



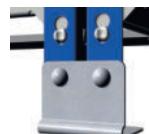
**⑦ TIE PLATE PU3/PU3Z**



**⑧ STEEL SHELF REFORCE**



**⑨ STEEL FEET CMR2**



**⑩ PLASTIC FEET**



# Boltless shelving for small size loads **Riveto® 2**



## STANDARD COLOURS

### UPRIGHTS



Blue  
5019



Brown  
8017



Pregalvanized

### BEAM / CROSSBEAM



Brown  
8024



Grey  
7032



Pregalvanized

## ACCESSORIES



### Spacer

Recommended for bays 2 m. And higher.  
Distance from wall:  
50 mm. - 100 mm.



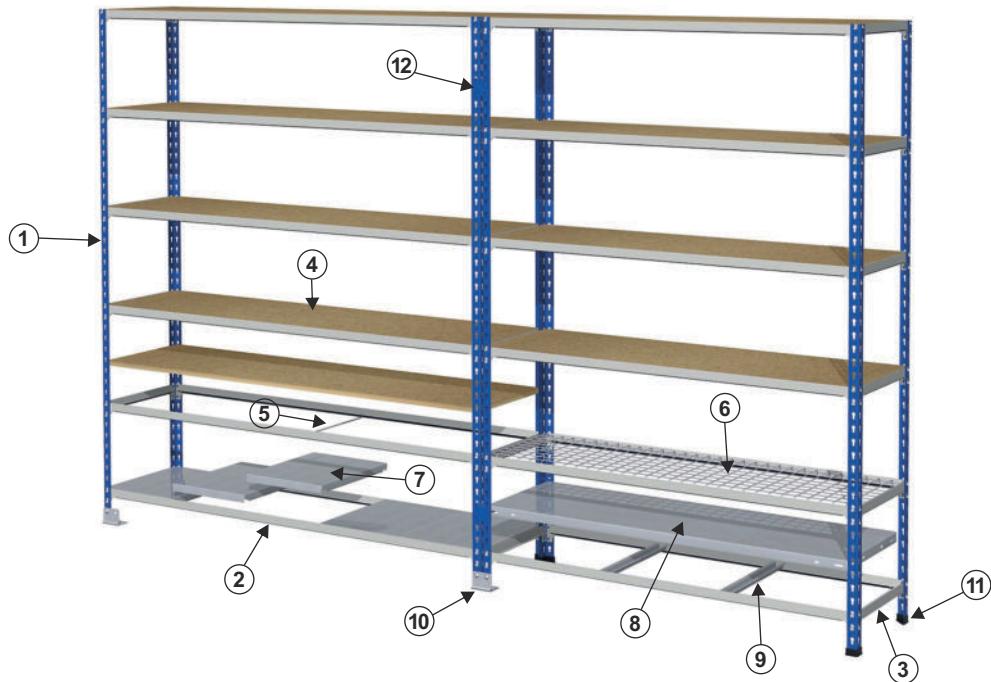
### Dividers and ledges

This system keeps the shelves perfectly distributed so as to avoid accidental falls.



### Magnetic labels

Dimensions: 80 X 25 mm.



① UPRIGHT R2/R2Z

1,8 mm. Thickness

1.981 mm.
2.438 mm.
3.048 mm.



② BEAM V/VZ

2 mm. Thickness

V12	304 mm.
V14	365 mm.
V15	381 mm.
V18	456 mm.
V24	609 mm.
V30	731 mm.
V36	914 mm.
V40	1015 mm.
V48	1219 mm.

③ CROSSBEAM V

V12	304 mm.
V14	381 mm.
V18	456 mm.
V24	609 mm.
V30	731 mm.
V36	914 mm.



2 mm. Thickness

④ CHIPBOARD PANEL AGL

16 mm. Thickness



⑤ WIRE BRACING VH



⑥ WIRE MESH



⑦ STEEL PANEL R2



⑧ STEEL SHELF SZ



⑨ STEEL SHELF REFORCE



⑩ STEEL FEET CMR2



⑪ PLASTIC FEET



⑫ TIE PLATE PU2/PU2Z



# Boltless shelving for medium size loads

**Riveto® 1** *light*



## STANDARD COLOURS

### UPRIGHTS



Blue 5019      Grey 7032      Pregalvanized

### BEAM / CROSSBEAM



Orange 2004      Grey 7032      Pregalvanized

### BAYS



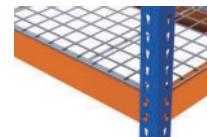
Chipboard panel



Melamine



Steel panel



Wire mesh

### MAXIMUM LOADING

 (Chipboard panel: 16 mm. Thickness). Kg/level U.D.L.

Depth	316 mm. - 486 mm. - 621 mm.				
Width	1.231 mm.	1.536 mm.	1.841 mm.	2.146 mm.	2.450 mm.
L	170 Kg/level	145 Kg/level	110 Kg/level	-	-
LA+A	590 Kg/level	440 Kg/level	285 Kg/level	-	-
LA+2A	-	471 Kg/level	305 Kg/level	-	-
U	350 Kg/level	290 Kg/level	225 Kg/level	175 Kg/level	120 Kg/level
UA+A	695 Kg/level	630 Kg/level	560 Kg/level	465 Kg/level	370 Kg/level
UA+2A	-	647 Kg/level	575 Kg/level	478 Kg/level	380 Kg/level

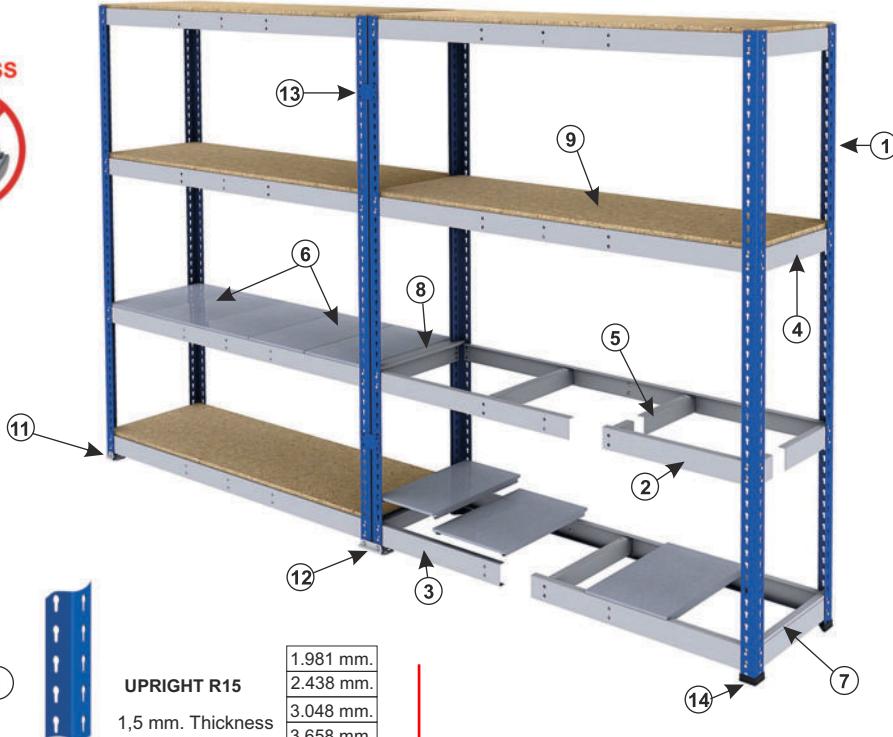
Depth	773 mm. - 926 mm. - 1.231 mm.				
Width	1.231 mm.	1.536 mm.	1.841 mm.	2.146 mm.	2.450 mm.
L	195 Kg/level	165 Kg/level	110 Kg/level	-	-
LA+A	445 Kg/level	450 Kg/level	315 Kg/level	-	-
LA+2A	-	500 Kg/level	350 Kg/level	-	-
U	490 Kg/level	395 Kg/level	305 Kg/level	220 Kg/level	125 Kg/level
UA+A	540 Kg/level	575 Kg/level	540 Kg/level	470 Kg/level	405 Kg/level
UA+2A	-	591 Kg/level	555 Kg/level	483 Kg/level	416 Kg/level

(13) PLASTIC FEET  
PU1, PU1Z



(14) TIE PLATE





**(2) BEAM LA15/LAZ15**

LA48	1196 mm.
LA60	1501 mm.
LA72	1806 mm.

1,5 mm. Thickness



**(3) BEAM UA15/UAZ15**

UA60	1.501 mm.
UA72	1.806 mm.
UA84	2.111 mm.
UA96	2.415 mm.

1,5 mm. Thickness



**(4) CROSSBEAM L15/L15Z**

L12	280 mm.
L18	433 mm.
L24	585 mm.
L30	737 mm.
L36	890 mm.
L48	1194 mm.

1,5 mm. Thickness



**(5) BRACING A**

A12	306 mm.
A18	459 mm.
A24	611 mm.
A30	763 mm.
A36	916 mm.
A48	1.220 mm.

1,8 mm. Thickness



**(6) STEEL PANEL R1 (PB y PC), SPR1**



**(7) SIMPLE STEEL PANEL CLOUSE SPR1**



**(8) DOUBLE STEEL PANEL CLOUSE SPR1**



**(9) CHIPBOARD PANEL AGL**



16 mm. Thickness

**(10) SPACER R1Z**



**(11) STEEL FEET CMS1Z**



SHIM PLATES PNZ



**(12) STEEL FEET CMD1Z DOUBLE**



# Boltless shelving for large size loads

**Riveto® 1**



**BOLTL**



MULTIPLES  
APPLICATIONS  
ACCESSORIES

## STANDARD COLOURS

### UPRIGHTS



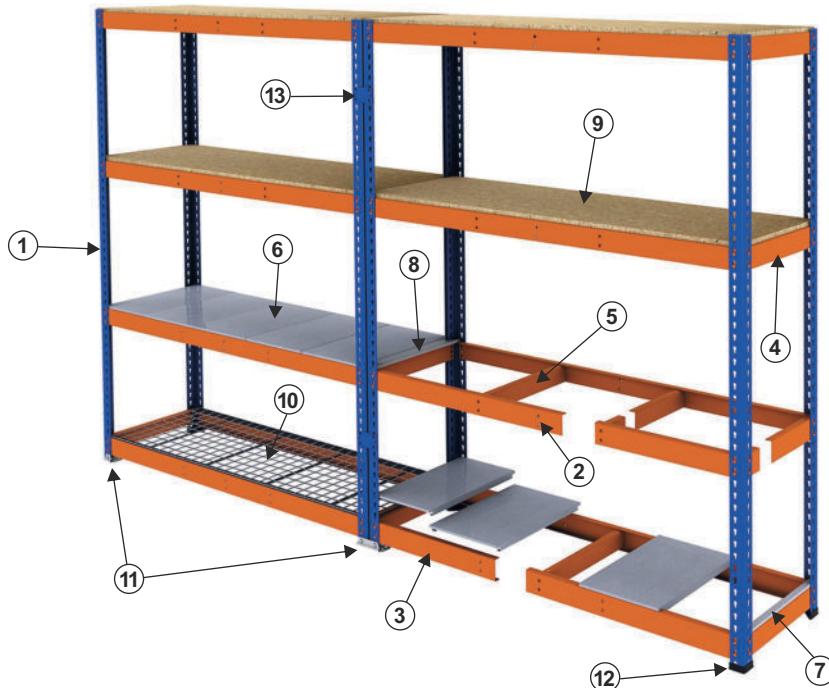
### BEAM / CROSSBEAM



**MAXIMUM LOADING** (Chipboard panel: 16 mm. Thickness). Kg/level U.D.L.

Depth	316 mm. - 486 mm. - 621 mm.				
Width	1.231 mm.	1.536 mm.	1.841 mm.	2.146 mm.	2.450 mm.
L	590 Kg/level	440 Kg/level	190 Kg/level	-	-
LA+A	770 Kg/level	640 Kg/level	420 Kg/level	-	-
LA+2A	-	680 Kg/level	450 Kg/level	-	-
U	960 Kg/level	706 Kg/level	536 Kg/level	400 Kg/level	250 Kg/level
UA+A	1100 Kg/level	800 Kg/level	610 Kg/level	577 Kg/level	545 Kg/level
UA+2A	-	1000 Kg/level	700 Kg/level	600 Kg/level	560 Kg/level

Depth	773 mm. - 926 mm. - 1.231 mm.				
Width	1.231 mm.	1.536 mm.	1.841 mm.	2.146 mm.	2.450 mm.
L	467 Kg/level	344 Kg/level	200 Kg/level	-	-
LA+A	800 Kg/level	640 Kg/level	420 Kg/level	-	-
LA+2A	-	640 Kg/level	470 Kg/level	-	-
U	760 Kg/level	560 Kg/level	720 Kg/level	323 Kg/level	200 Kg/level
UA+A	920 Kg/level	820 Kg/level	720 Kg/level	620 Kg/level	500 Kg/level
UA+2A	-	1050 Kg/level	800 Kg/level	660 Kg/level	570 Kg/level



① UPRIGHT R1/R12

2 mm. Thickness

1.981 mm.
2.438 mm.
3.048 mm.
3.658 mm.



② BEAM LA/LAZ

LA48	1.196 mm.
LA60	1.501 mm.
LA72	1.806 mm.

2 mm. Thickness

③ BEAM UA/UAZ

2 mm. Thickness

UA48	1.196 mm.
UA60	1.501 mm.
UA72	1.806 mm.
UA84	2.111 mm.
UA96	2.415 mm.

④ CROSSBEAM L/LZ



2 mm. Thickness

L12	280 mm.
L18	433 mm.
L24	585 mm.
L30	737 mm.
L36	890 mm.
L48	1.194 mm.

⑤ BRACING A/AZ



A12	306 mm.
A18	459 mm.
A24	611 mm.
A30	763 mm.
A36	916 mm.
A48	1.220 mm.

⑥ STEEL PANEL R1/SPR1-N



⑦ SIMPLE STEEL PANEL CLOUSE SPR1



⑧ DOUBLE STEEL PANEL CLOUSE SPR1



⑨ CHIPBOARD PANEL AGL



16 mm. Thickness

⑩ WIRE MESH



⑪ STEEL FEET



SIMPLE CMS1Z



DOUBLE CMD1Z

⑫ PLASTIC FEET



⑬ TIE PLATE PU1/PU1Z



# A two tier system shelving **Riveto I**

- This storage system will take advantage of the existing vertical space in the warehouse by creating different shelving floors, which are connected among them by stairs and aisles.
- Modular system. There is the possibility to increase the installation sideways and in depth without no problem.
- It can be adapted to the available space.



## Example

Floor area: 40 m.<sup>2</sup>

Height of the system: up to 4,8 m.

Warehousing area: 140 m.<sup>2</sup>

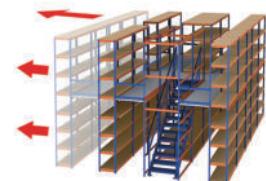
UPRIGHT	BEAMS / CROSSBEAMS
Blue 5019	Blue 5019

Grey 7032	Orange 2004	Grey 7032



## Sideways expansion



## Expansion in depth



## BAYS

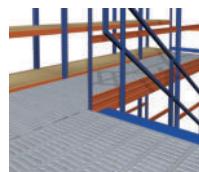


Chipboard panel



Steel panel

## AISLES



Steel decking



Chipboard panel

**Riveto** Applications

Workstation with  
louvre back panel



Workbench



Workstation



Garment shelving



Large packing station



Side table



Hanging-reel



Tyre Rack

# Wide span shelving M66

Manual storage system for medium and heavy loads.

- Direct access to the goods. Best to use when many different items and irregular rotation.
- Great strength.
- Easy and fast assembly.
- Adjustable to different volume and cargo sizes.



## BEAMS



BEAM Z35



BEAM ZG35

### Beam Z35 - ZG35

Thickness	1,5 mm.
Standard lengths (mm.)	890-1070-1250 1425-1605



BEAM Z55E



BEAM ZG55E

### Beam Z55e - ZG55e

Thickness	1,5 mm. - 1,8 mm.
Standard lengths (mm.)	890-1070-1250-1425-1605-1785-1960-2140



BEAM Z65E



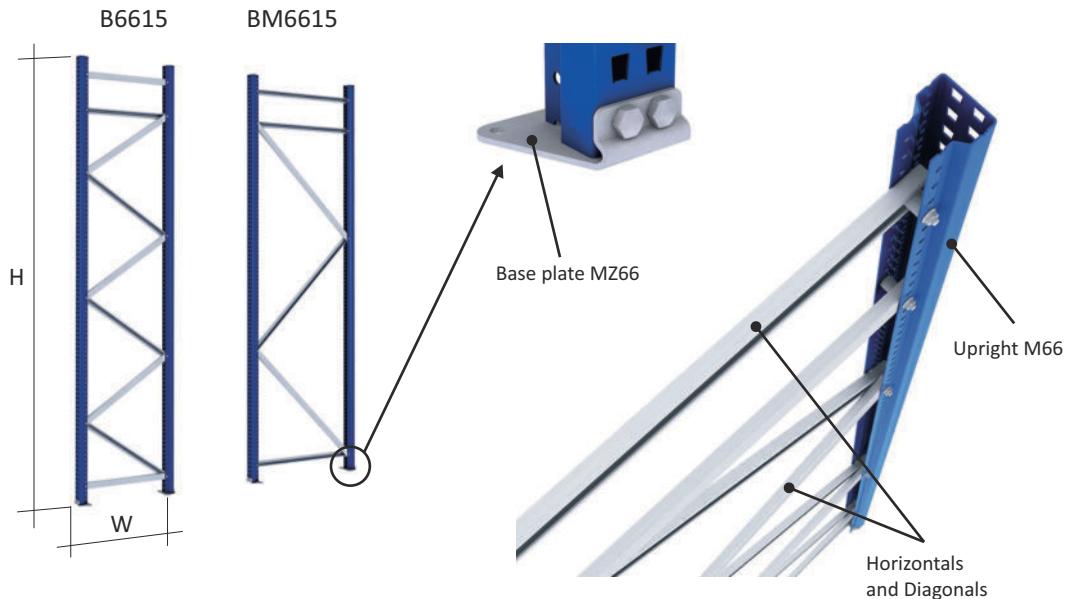
BEAM ZG65E

### Beam Z65e - ZG65e

Thickness	1,8 mm. - 2 mm.
Standard lengths (mm.)	1605-1785-1960 2140-2315-2500-2675

## Components

### FRAMES



	B6615	BM6615
Min/Max Height (H)*	2500 / 5500 mm.	1500 / 3250 mm.
Frames width (W)	400 - 600 - 800 - 1000 mm.	

\* The frames standard heights increase in steps of 250 mm.



Beam Z85e - ZG85e	
Thickness	2 mm.
Standard lengths (mm.)	1605-1785-1960 2140-2315-2500-2675

GRAN MILANO



Beam Gran Milano	
Thickness	1,5 mm.
Standard lengths (mm.)	890-1070-1250 1425-1605-1785

BEAM MV



Beam MV	
Thickness	2 mm. - 2,3 mm. - 3 mm.
Standard lengths (mm.)	890-1070-1250 -1425

# Pallet Racking



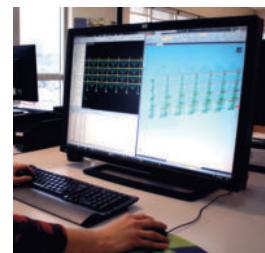
- It is the suitable system for the storage of palletized loads of multiple references.
- it allows the immediate access to all the units of load.
- Great resistance. Conventional Pallet Racking adapts to the storage need.



## Custom made projects

Our Technical Department has the solution for any storage need.

Design and execution of special storage systems with the most advanced informatic programs.



## Safety and Protection



### ANTI-FALL MESH

Electrowelded mesh panels are used as security closings in aisle or transit areas to avoid goods from falling.

### PROTECTIONS FOR FRAMES AND UPRIGHTS



## Components

FOLDED BASE PLATE

PLK5



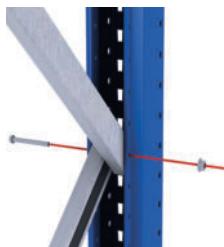
NBP4



UPRIGHT ER



HORIZONTAL/DIAGONAL



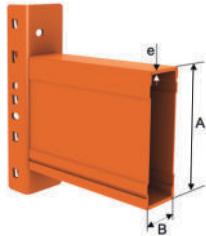
Standard finishing Pregalvanized

Standard finishing Blue 5019 Pregalvanized

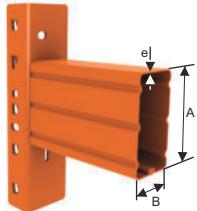
Standard finishing Pregalvanized



EGN BEAM



LNS BEAM



Best Performance up to 2700 mm beam length and 1000 kg/pallet weight.



SAFETY CLIP

Standard finishing Pregalvanized



DUO CONNECTOR

For EGN Beams

Standard finishing Orange 2004

Dimensions* (A x B x e)	Connector
EGN 135x50x1,5	
EGN 140x50x1,5	
EGN 140x50x2	
EGN 150x50x1,5	
EGN 150x50x2	
EGN 165x50x1,8	
LNS 60x50x1,5	DUO
LNS 80x50x1,5	
LNS 100x50x1,5	
LNS 110x50x1,5	
LNS 120x50x1,5	
LNS 130x50x1,5	

\*Dimensions in mm.

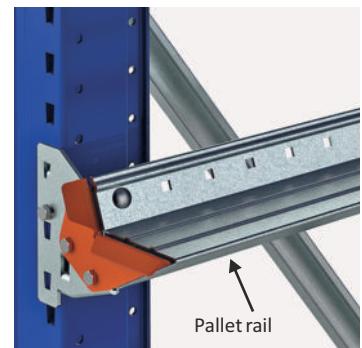


**ACCESSORIES:**  
Defenses  
Crossbeams  
Spacers  
Metallic panels  
etc...

## Drive In



- Cost effective solution to high density storage.
- Significant feature is that up to 85% of the available space can be used.
- Appropriate system when loading large quantities of like-product.



It is a forklift guidance system that allows work in lanes with more than six meters depth and height.

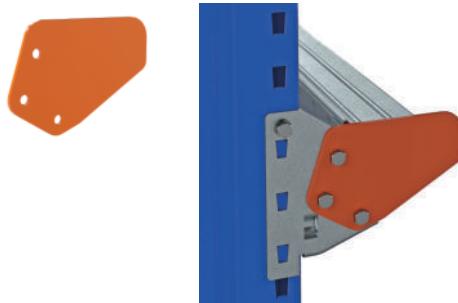
### Post Protector

It is important to protect the bottom of posts and frames.



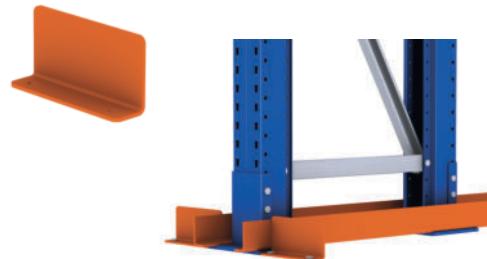
### Load Level Pallet Stopper

This element prevents the pallets from falling at the end of the aisle in a single entry type of drive-in.



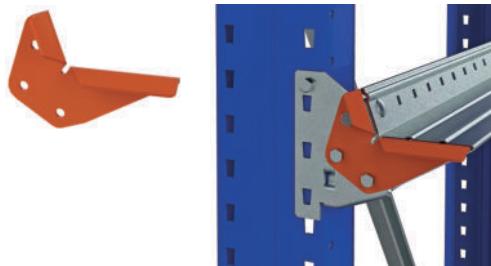
### Floor Level Pallet Stopper

This element works as an aisle end reference for the floor level in a single entry type of drive-in.



### Pallet Entry Guide

This element makes easier the pallet entry and guidance on the aisle, avoiding falls or damage to the goods.



# Cantilever Racking



- The main characteristic of the Cantilever Storage System is its capacity to support high volume and length loads.
- It can also be perfectly adapted to the different needs such as variable length and different heights loads. It allows as well to place levels at one or both sides of the central column and its assembly is simple.

Standard dimensions	
Column height (H*)	2500-3000-3500-4000-4500-5000-5500-6000-6500-7000
Arm length (L*)	600-800-1000-1250-1500

\* Measures in mm.



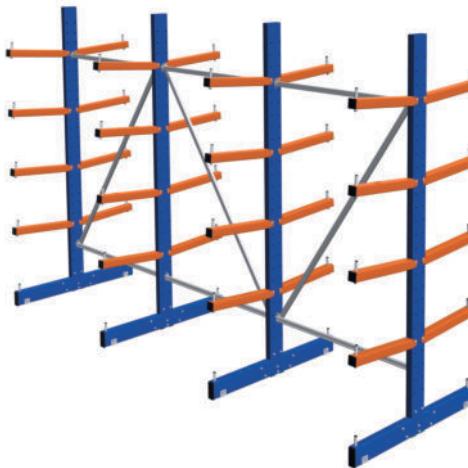
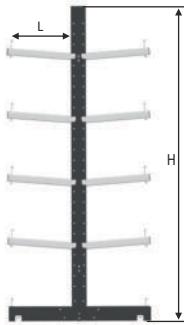
## Light Cantilever

- A system for storing **light loads** of great lengths or volumes.

Single Frame



Double Frame



### Standard dimensions

Column height (H*)	400-500-600-700-800-900-1000-2000-2500-2900
Arm length (L*)	70-80-90-100-120-150-180

\* Measures in mm.

## Vertical Storage Cantilever

- Storage system designed for long loads or big volume ones in a **vertical disposition**.



The arrangement of the spacer arms can be adjusted to the client's necessities.



# Shuttle Cart



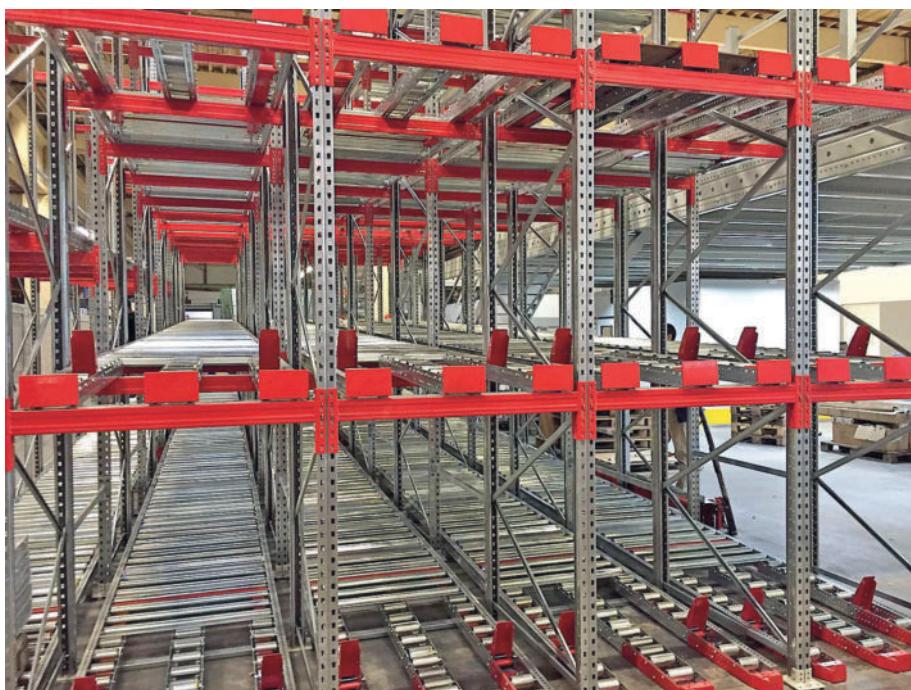
- The main feature of our Shuttle Car System is to facilitate and improve the loading and unloading of goods, without the need for trucks to access the storage aisles.
- The shuttle car runs on rails, selecting input and output pallets via a remote control.

ASK FOR OUR  
PRODUCT  
CATALOGUE



## Pallet live storage

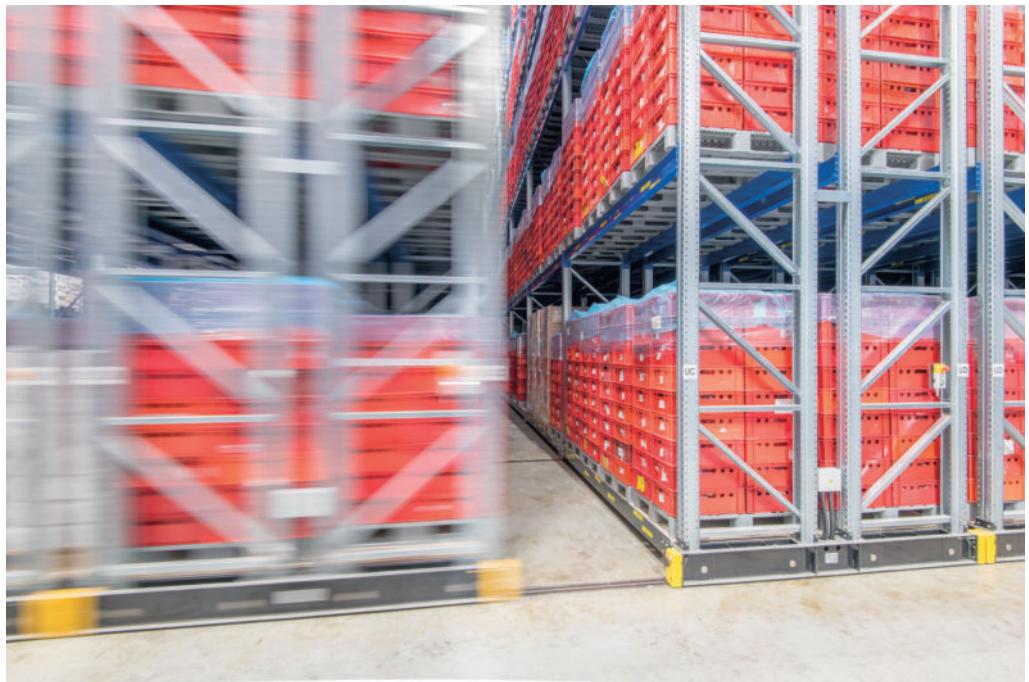
- Flow racking systems for boxes or pallets.
- Sloped roller truck beds for a perfect motion of the pallets.



# Mobile pallet racking



- High storage density.
- The Pallet racking is fitted on rail-guided mobile bases.
- Optimal for high floor prices.
- Perfect for cold storage systems.



## Mezzanine floor

- Maximum advantage of warehouse free area, doubling or tripling the surface area.
- Mezzanine floors may be used with elevating systems which enable goods accessibility.



CUSTOM  
MADE  
PROJECTS



# Automated Storage Systems



Manage your warehouse on an automated way and optimize the storage, the picking processes and the shipping of your goods.

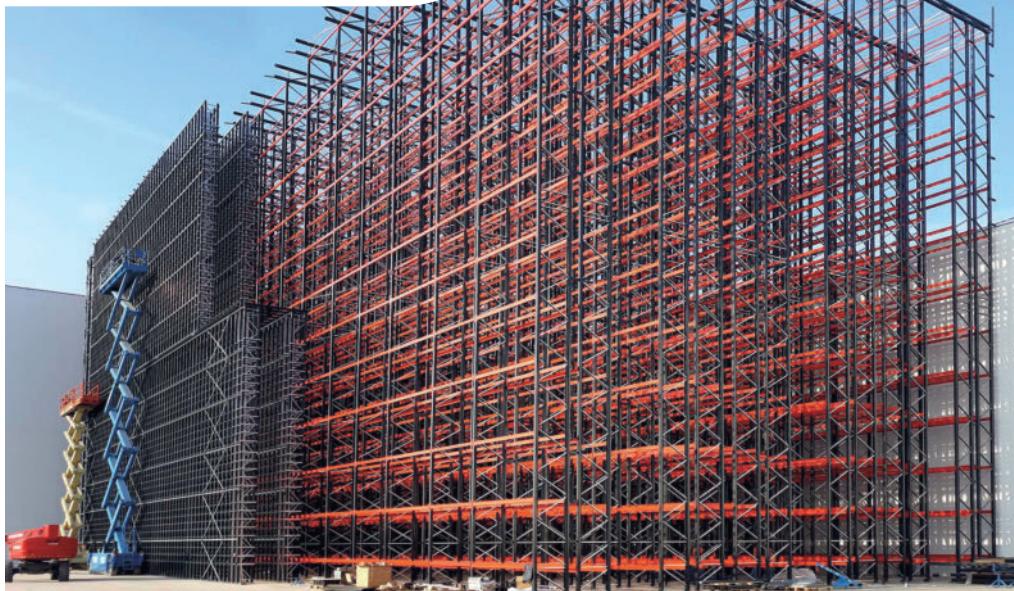
Maximum stock control, speed up your picking processes and higher efficacy in the inbound and outbound of goods.



## Rack Clad Building



- Warehousing solution where shelving conform the building itself, without construction works.
- Created to store in height, being able to overtake 30 m.
- The elements of the system together with the enclosures of the building make up a compact block that allow the automation of the storage processes.





Esnova incorporates to its product range a new software tool to manage our storehouses in a comfortable, easy and profitable way.

Esnova Software is the warehouse management tool that optimizes all processes (reception, order preparation, shipping), reducing costs and improving the service quality. It is based in an effective and easy managing for any user.

= + **EFFICIENT**  
**INTUITIVE**



**THE BRAIN OF YOUR  
WAREHOUSE**



It decreases up to 90% the risk of errors, resulting in a significant time and money saving.

It speeds up common procedures as reception, storing, order preparation and shipping.

It increases the storage profitability and allows control the existing stock in real time.

Esnova Software is designed to make its use easy and intuitive.

Is a custom-made tool, adaptable to the needs of each customer.

Better exploitation of the storage space and merchandise organization.

Accurate control of the tracking for the different references in the warehouse.

Using this tool you will be able to analyze your store's statistics, providing decision-making and increasing productivity.

Find out more about in...



*Ask for our product catalogs!*

**Light and Medium Loads:**

Manual Rack  
Riveto Shelving System  
Slotted Angle Shelving

**Large Loads:**

Pallet Racking  
Drive In  
Shuttle Cart  
Cantilever  
Rack Clad Building  
Robotized Systems

**Mobile pallet racking**  
**Dynamic shelves**

**Multi-tier shelving**  
**Mezzanines**



**Warehouse Management Software:**

How to organize a warehouse?  
This software specially designed to the warehouse management is the perfect IT tool to have a logistic control of your storage space.

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Management System  
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ISO 14001:2004  
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