

# IRON FIST. PALLET RACKS



www.rosss.it



# **RESEARCH**

- PIONEERS OF EARTHQUAKE PROOF
- INTERIOR LABORATORY TEST

ROSSS installed its first anti-seismic plant in 1996. In 2006 it performed important experiments and tests on the shaking table of Athens University and in the same year it got a patent for the first Italian anti-seismic foot. Today ROSSS continues to carry out research and specialized studies in the anti-seismic field, supported by important Italian and foreign Universities. ROSSS is the only Italian company in this field to have its own efficient and modern Laboratory Test.

## RESPONSIBILITY

- CERTIFICATIONS: PRODUCT, ENVIRONMENTAL AND SOCIAL RESPONSIBILITY
- RADIOACTIVITY MONITORING
- THE ONLY ONE COMPANY OF ITS SECTOR LISTED ON THE STOCK EXCHANGE

ROSSS is the first Italian company of the sector which has achieved the ISO 9001 Quality Certification. ROSSS is also certified in terms of Social Responsibility (SA 8000) and Environmental (ISO 14000 and EMAS). ROSSS products are certified according to European standards. All steels used by ROSSS are free of radioactive contamination, according to the Legislative Decree 101 dated 31.07.2020, Implementing directive 2013/59/EURATOM.



# **BELATIONSHIP**

- MORE THAN 50% OF EXPORT TURNOVER
- MORE THAN 50 COUNTRIES SERVED IN THE WORLD
- OPENNESS TOWARDS CUSTOMERS

ROSSS gains more than 50% of its turnover exporting its production in more than 50 Countries in the world. ROSSS is always available to welcome its guests for visits to its systems.

# RIGOROUSLY MADE IN ITALY "

- ALL MADE IN ROSSS
- ALL MADE IN ITALY

ROSSS designs and produces all range of products in its facilities located in Italy.

# The 7 ROSSS pallets

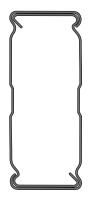
### A new way of thinking at pallets rack.

A safe, strong and resistant system, easy to assemble and to adapt to all different warehouses needs. **IRON FIST** is the industrial rack for heavy storage that optimizes the spaces and multiply the storage capacity. Projected, made and patented by **ROSSS**.



### **COUPLED SHAPED "C" PROFILE**

Better rating between charge capacity and price: high performances, great convenience. Absence of welding on the whole axle of the profile thanks to the special embossing of the external wing. The joining and the tightening of the two profiles has been conceived so as to get a double thickness in the parts more under stress.

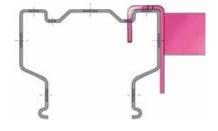




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### **"U" CONIC CLUTCH**

The connection between beam and upright is ensured by the exclusive "U" clutch with conic inclination of III° that increases beams and frames charge capacity. Safety and resistance are subsequently strengthened by the welded bracket that allows to vary the number of teeth to better improve the several charge capacities. The no sliding static resistance, tested against oscillations, gives stability and seismic performances to the full structure.





### BEAM WITH HIGH SAFETY COEFFICIENTS IN ONLY 1,2 mm THICKNESS

One of the best beam with the highest performance on the market: it withstands over the double load declared. High reliability and safety in little more than one millimeter of thickness.

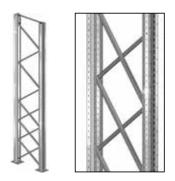


# rack innovations



## NEW FRAMES CROSS BRACING ST. ANDREW'S CROSS

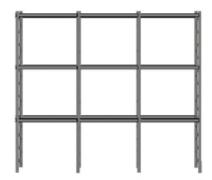
The uniformly strength distribution on the uprights optimizes the frame load capacity in a significantly way.





# POSSIBLE LAYOUT WITHOUT VERTICAL CROSS BRACING, ALSO IN CASE OF SEISMIC CONFIGURATION

More liberty and versatility of use in the warehouse. Remarkable increase of loading charge in seismic areas.





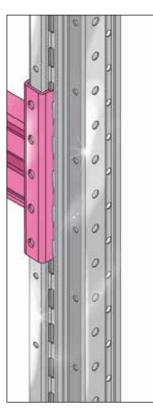
### UPRIGHT WITH THE WIDEST STEEL SURFACE ON THE MARKET

Maximum sturdiness: the upright special folds conformation involves a greater steel quantity in comparison to the actual productive standards.



### HOLES NOT LINED UP TO THE PERFORATIONS

A small detail that makes a difference: it eliminates the co-existence of empty carvings that might weaken the upright capacity, it harmonizes the steel consistence through the full element, it keeps the edges free from perforations so as to guarantee the highest charge and bumps resistance.









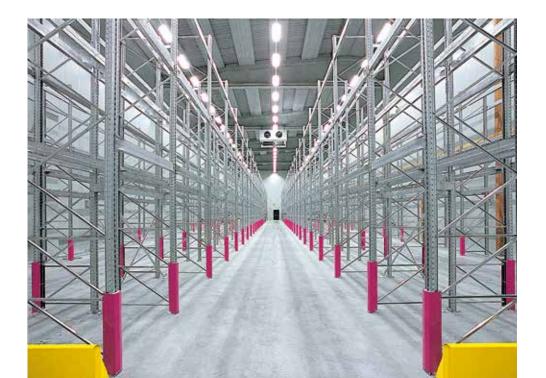


### **COOP ITALIA**

Sesto Fiorentino Firenze









### **CONAD**

San Salvo Chieti











### **COMER**

Reggiolo Reggio Emilia











### **VALSIR**

Vestone Brescia









### **STARLINE**

Costa di Mezzate Bergamo













### **DN LOGISTICA**

Catania









### **VARVAGLIONE**

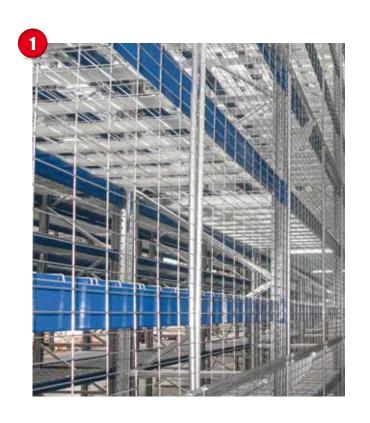
Contrada Santa Lucia Taranto

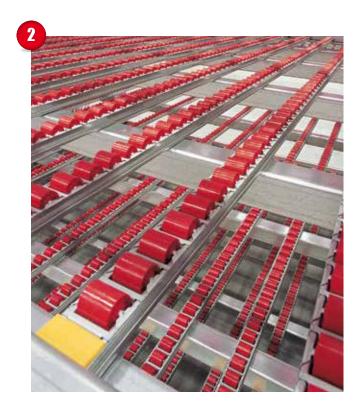




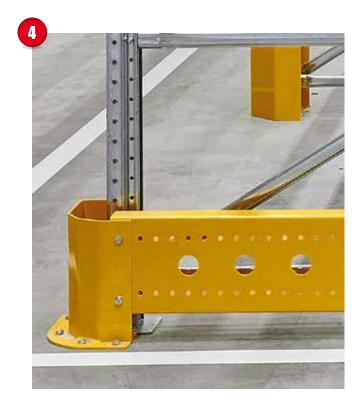
# IRON FIST ACCESSORIES

Different requirements, one solution.

















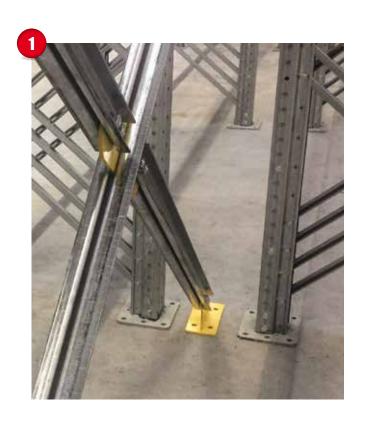


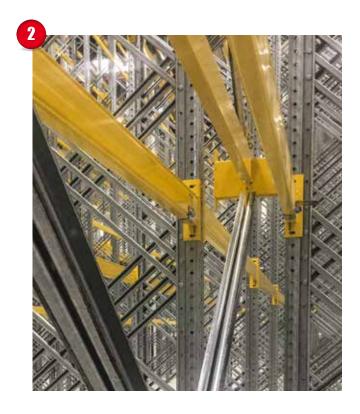
- 1. Back mesh panels
- 2. Rollers detail
- 3. Shaped upright protection\*
- 4. Upright side protection
- 5. Shelves clasping with not-crushing profile
- 6. Grating grid
- 7. Back stop pallet
- 8. Mesh deck
- 9. IRON FIST installation with coils support



# IRON FIST ACCESSORIES

Different requirements, one solution.

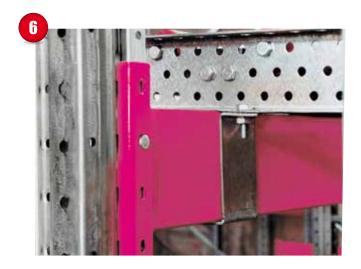








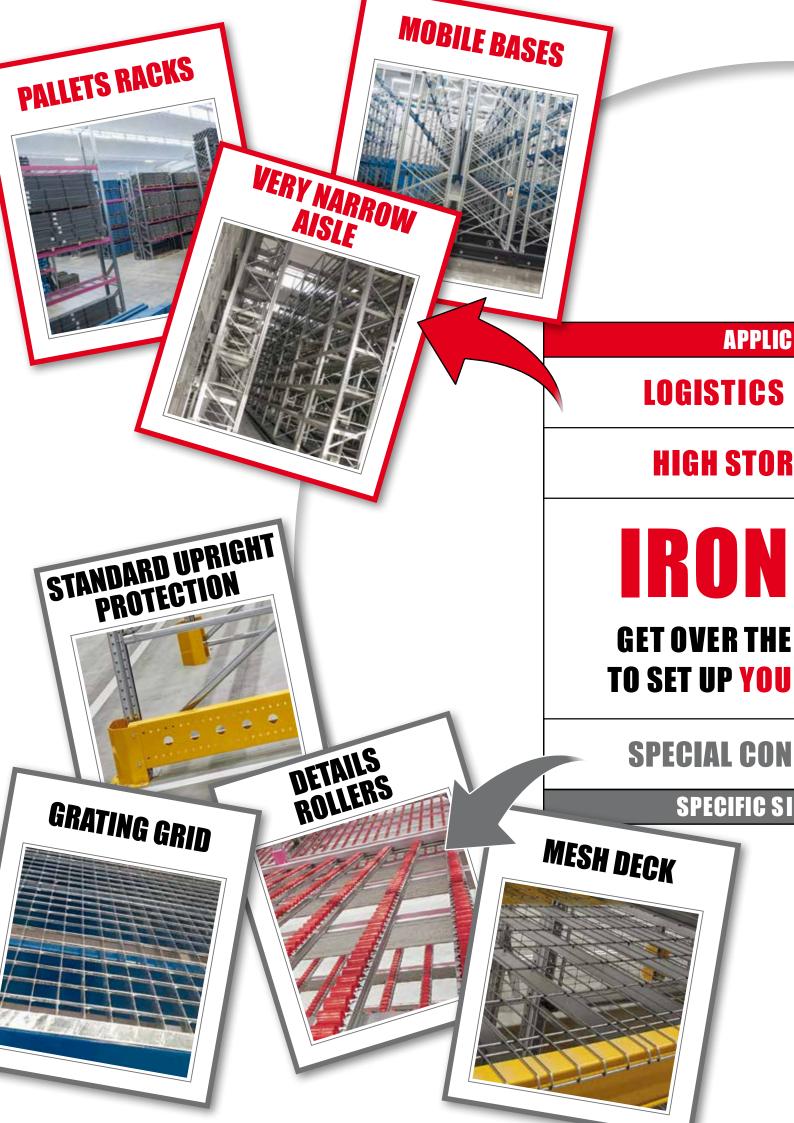






- 1. Floor anchorage for earthquake-proof cross bracing
- 2. Joint for seismic strengths conduction
- **3.** Vertical dividers for long materials
- 4. Bays of charge
- 5. Gravity racks installation for packages
- 6. Details gravity racks installation for pallets
- 7. Gravity rack installation for pallets









# IRON FIST

### Technical data and all information

### **STEEL USED**

#### **UPRIGHT**

The steel used for making the uprights is of a certified structural type S350 GD, with a minimum unit yield strength of 350 N/mm<sup>2</sup>. The product is obtained by galvanized coils through pressing and cold roll forming process.

#### **BFAMS**

The steel used for making the beams is of a certified structural type S355 MC, with a minimum unit yield strength of 355 N/mm<sup>2</sup>. The product is obtained by coils through profiling and then seaming.

#### **FOOT PLATES**

The steel used for making the foot plates is of a certified structural type S250 GD, with a minimum unit yield strength of 250 N/mm<sup>2</sup>. The product is obtained by pickled coils with a pressing process and then galvanizing.

#### **DIAGONALS AND HORIZONTALS**

The steel used for making diagonals and horizontals is of a certified structural type S250 GD, with a minimum unit yield strength of 250 N/mm<sup>2</sup>. The product is obtained by galvanized coils through profiling.

#### **CONNECTORS FOR WELDED BEAMS**

The steel used for making the connectors is of a certified structural type S355 MC, with a minimum unit yield strength of 355 N/mm<sup>2</sup>. The product is obtained by coils through a pressing process.

#### **DRIVE-IN RAIL PALLET SUPPORT**

The steel used for making the rail is of a certified structural type S350 GD, with a minimum unit yield strength of 350 N/mm<sup>2</sup>. The product is obtained by coils through a pressing process.

#### **DRIVE-IN UPPER CONNECTION**

The steel used for making the upper connection is of a certified structural type S250 GD, with a minimum unit yield of 250 N/mm<sup>2</sup>. The product is obtained by sheets plate or coils through pressing.

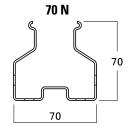
### **DRIVE-IN CROSS BRACING**

The steel used for making the cross bracings is of a certified structural type S250 GD, with a minimum unit yield strength of 250 N/mm<sup>2</sup>. The product is obtained by bars through a pressing process.

### **UPRIGHTS FOR FRAME COMPOSITION**

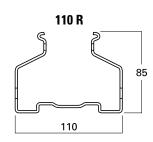
### **70 Type**

The upright type 70 is available in a thickness of 15/10 with slot spacing every 50 mm.



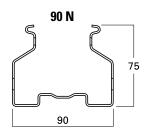
### **110 Type**

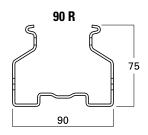
The upright type 110 is available in a thickness of 20/10 with slot spacing every 50 mm.



#### 90 Type

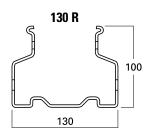
The upright type 90 is available in a thickness of 15/10 and 20/10 with slot spacing every 50 mm.

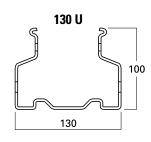




### **130 Type**

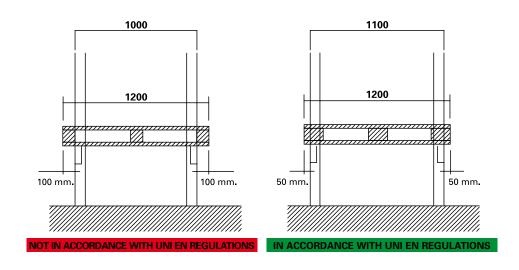
The upright type 130 is available in a thickness of 20/10 and 25/10 with slot spacing every 50 mm.





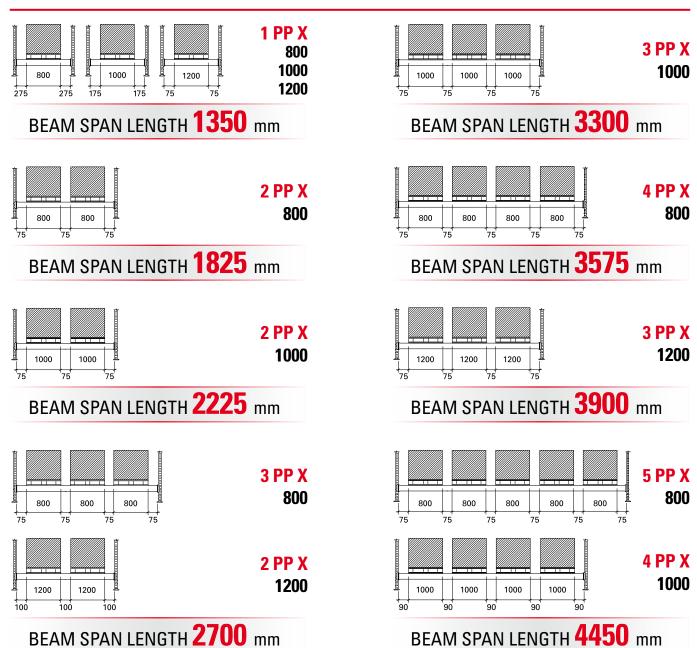
### FRAME STANDARDIZATION ACCORDING TO UNI EN REGULATION

As established by UNI EN 15620 it is recommended that the depth of the frames will be chosen according to the size of the pallet or box to be stored. In order to comply with this regulation, we have introduced new frame depths.



BEAM SPAN LENGTH 4450 mm

As established by UNI EN 15620 it is recommended that the depth of the frames will be chosen according to the size of the pallet or box to be stored. In order to comply with this regulation we have introduced new lengths for the beams.











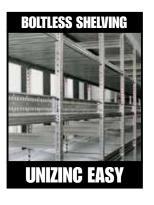


















# RACK & STORAGE SOLU1

RESEARCH, PRODUCTION, DISTRIBUTION OF METAL STRUCTURES FOR THE MANAGEMENT OF INDUSTRIAL AND COMMERCIAL AREAS: MOBILE BASES FOR ARCHIVES AND WAREHOUSES, IRON FIST PALLETS RACK AND DRIVE-IN, UNIMONDIAL, UNIZINC EASY, SEQUOIA CANTILEVER, MAMMUTH, DUBLEZ, MECANO, HIGH BAY WAREHOUSE, TREE CHEESE.

