

LOGISTICS STORAGE PALLET RACK SYSTEMS

www.nexlt.co.kr

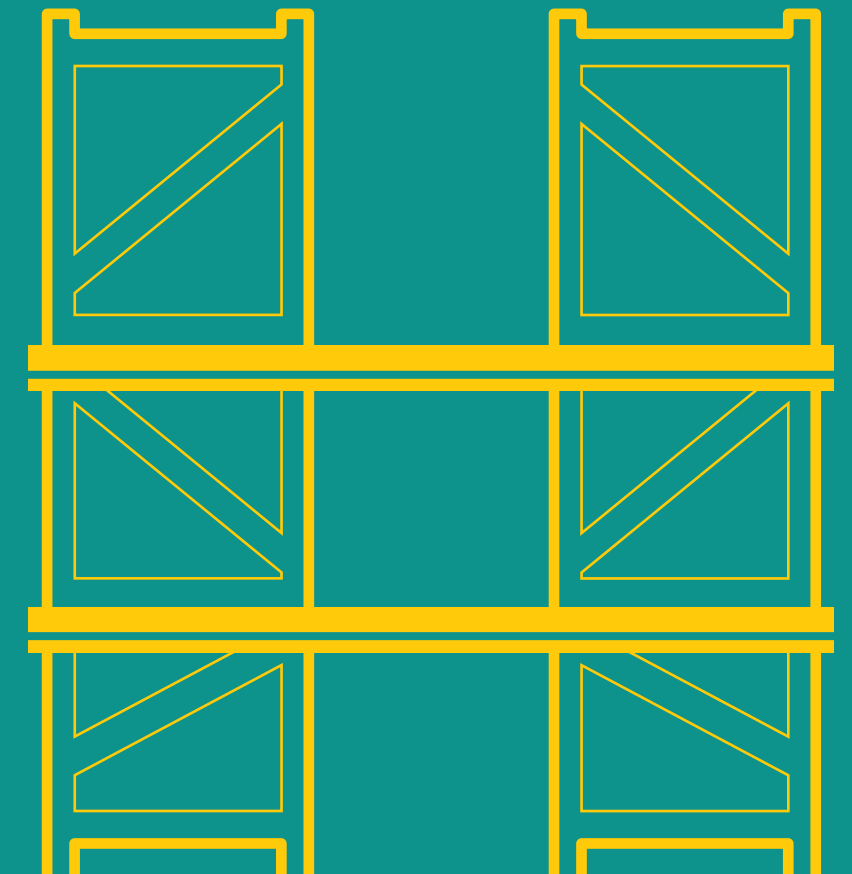
LOGISTICS CONSULTING & ENGINEERING SERVICE

STORAGE SYSTEMS

- PALLET RACK
- SLIDING RACK(PALLET, BOX, DANPRA, ETC)
- LIGHT WEIGHT RACK
- ARM RACK
- MEZZANINE SYSTEM
- CAROUSEL RACK (VERTICAL, HORIZONTAL)
- SHUTTLE RACK SYSTEM
- HIGH RACK
- PUSH BACK RACK (CART, ROLLER)
- MIDDLE WEIGHT RACK
- HANGER RACK
- DRIVE IN RACK
- MOBILE RACK SYSTEM
- ELECTRIC MOBILE RACK SYSTEM

PICKING, SORTING SYSTEMS & AUTO TRANSFER SYSTEMS

- DPS, DAS, DRS, PCS SYSTEM
- CONVEYOR SYSTEM
- APS SYSTEM
- SORTING SYSTEM



NEXLOGITECH
solution for next logistics technology

www.nexlt.co.kr

Floor 5th, , Gamilnam Ro 56, Hanam Si, Gyeonggi Do, 12993, Sputh of Korea , 12993 TEL : 02)402-9051,9057,3298 / FAX : 02)402-9053
FACTORY _ 444-19, Yeovang-ro, Yeosu-si, Gyeonggi-do, South Korea TEL : 82-402-9051,9057,3298 / FAX : 02)402-9053

Optimal component selection based on load conditions

Excellent safety and cost-effectiveness

Easy installation with simple assembly and disassembly

Freedom to choose specifications



solution for next logistics technology

CONTENTS

03

PALLET RACK SYSTEM

- 03 Pallet Rack System
- 04 Pallet Rack Advantages & Features
- 05 Pallet Rack Components
- 06 Pallet Rack Structure
- 07 Post Specifications
- 11 Pallet Rack Configuration
- 12 Safety Equipment

13

HIGH RACK / VNA RACK SYSTEM

- 13 High Rack System
- 14 High Rack Advantages & Features

15

DRIVE-IN RACK SYSTEM

- 15 Drive-In Rack System
- 16 Drive-In Rack Advantages & Features

17

PALLET SLIDING RACK SYSTEM

- 17 Pallet Sliding Rack System
- 18 Pallet Sliding Rack Advantages & Features

19

PUSH BACK SLIDING RACK SYSTEM

- 19 Push Back Sliding Rack System
- 20 Push Back Sliding Rack Advantages & Features

21

SAFETY

- 21 Warehouse Pallet Rack Collision Protection Device (NEXAGON-901TM)



solution for next logistics technology
NEXLOGITECH, INC

CRAFTED WITH CONFIDENCE
QUALITY PRODUCTS MADE IN THE KOREA



**Leading innovator in the logistics industry with cutting-edge technology
NEXLOGITECH, Inc.**

NEXLOGITECH is a specialized company that builds the foundation for the future logistics industry using cutting-edge logistics technology. With extensive experience and expertise in both domestic and international logistics industries and technologies, we are reinforcing our company's position as a flexible and professional enterprise.

Furthermore, our in-house research institute contributes to maximizing efficiency by providing high-quality logistics engineering services through the development and accumulation of core logistics technologies. This enhances the logistics competitiveness of leading companies by constructing integrated logistics systems and introducing highly efficient logistics technologies.

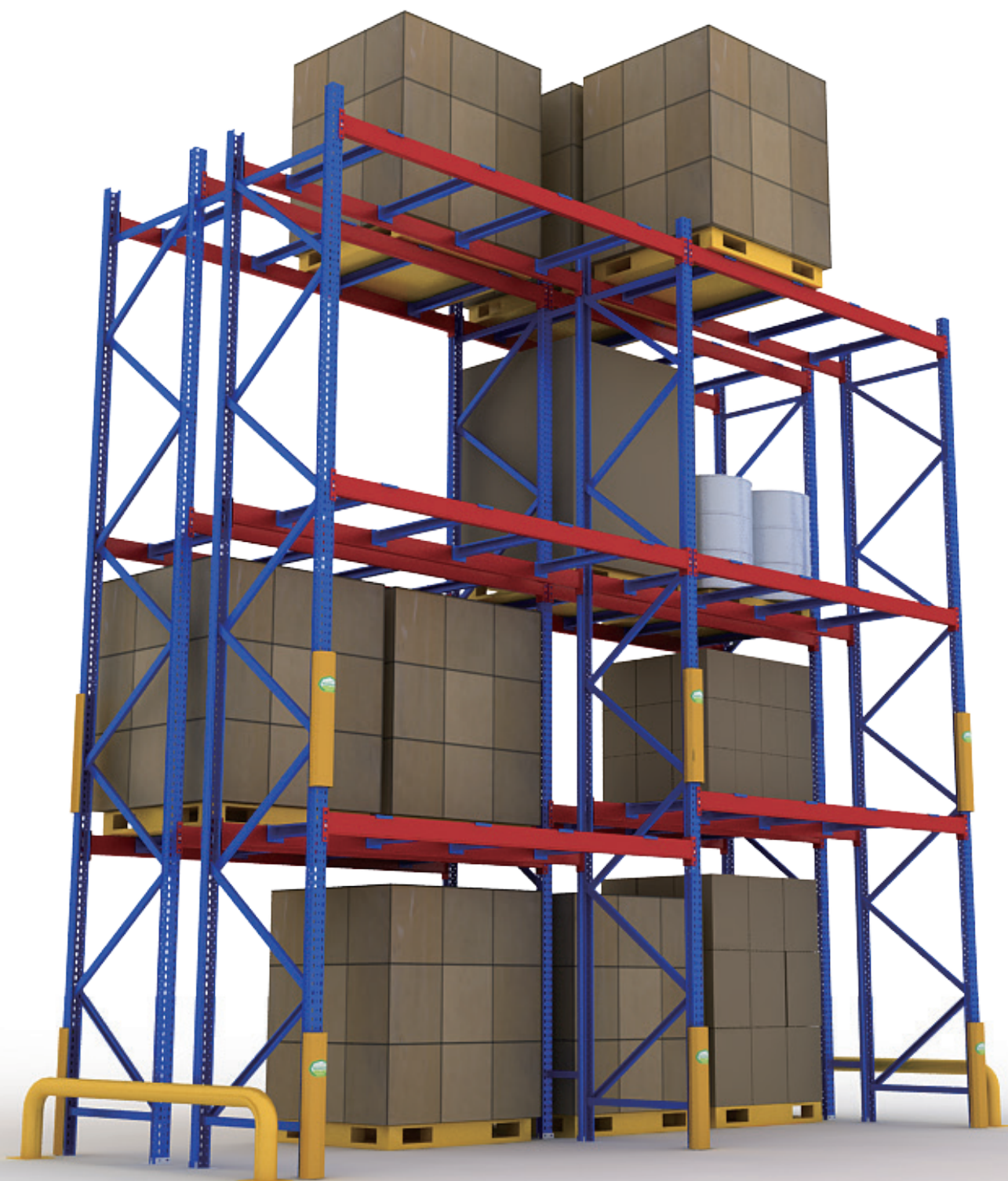
With active engagement in overseas logistics industry and technology exchange, NEXLOGITECH is well-equipped become an advanced logistics company by securing a strong business foundation through the globalization of logistics technology and taking on leading roles in the logistics technology market.

Above all, as a leader in South Korea's logistics technology, NEXLOGITECH is committed to relentlessly advancing the world's best logistics industry and technology through continuous research and investment.

PALLET RACK SYSTEM

PALLET RACK SYSTEM

The pallet rack system is a fully assembled, economical, and efficient storage solution for standardized cargo on pallets. It enables flexible storage for various items.



PALLET RACK ADVANTAGES & FEATURES

Low initial investment cost.

Easy shelf adjustment based on the size of stored items.

- Load beam height can be changed freely at 50mm increments.

Complete standardization due to the use of wide standard materials.

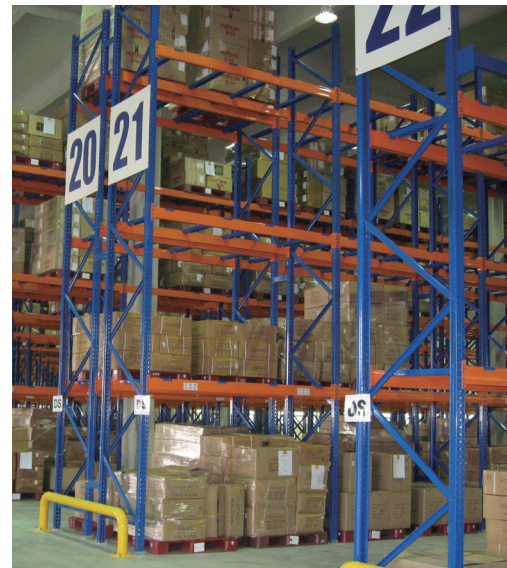
- Economical as various components can be selected according to the load requirements.

Excellent safety and economy through design and construction, considering the volume and load of the items being handled.

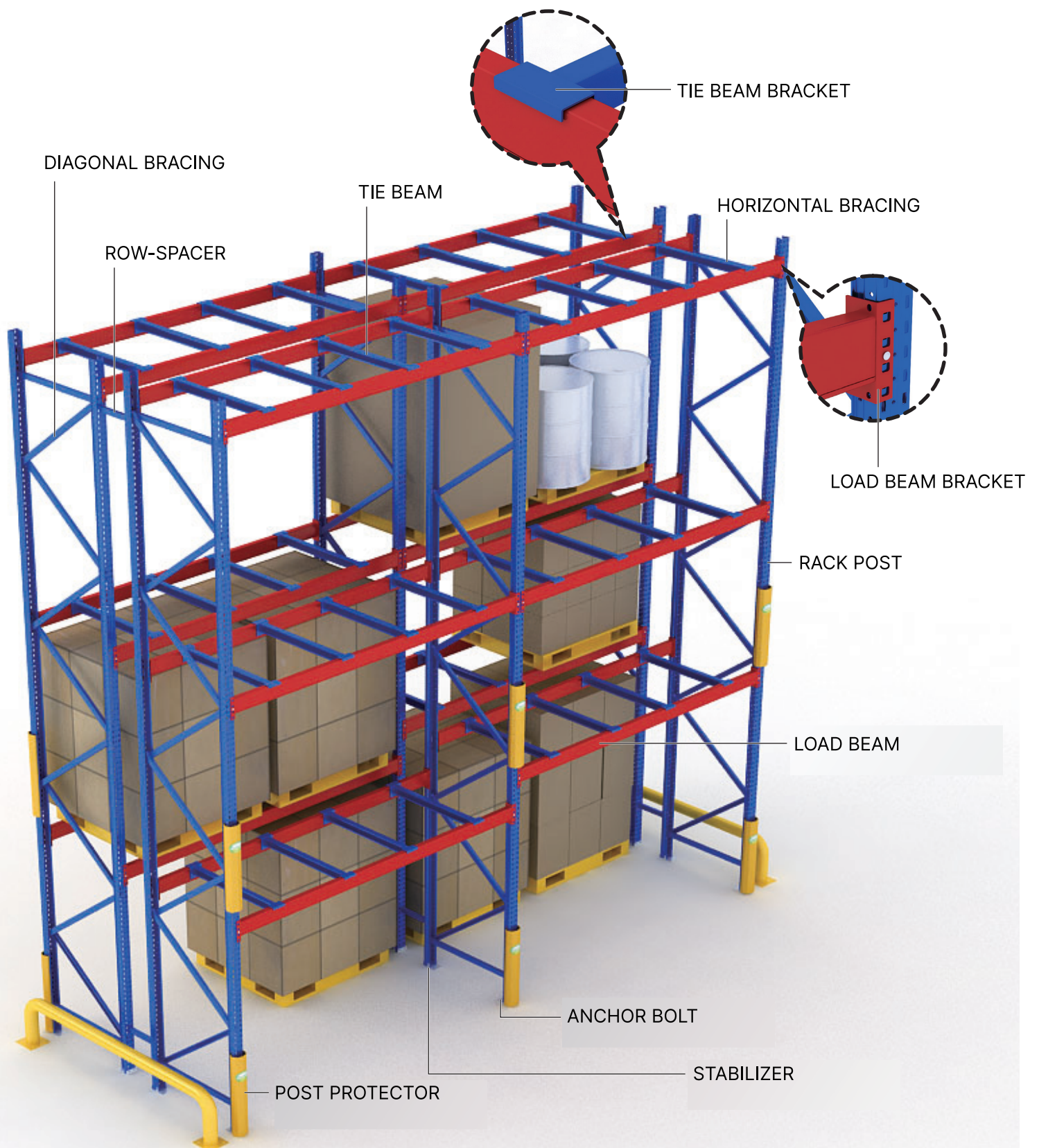
Simple inventory management and in/out operations due to pallet-based storage.

Easy shelf adjustment based on the size of stored items.

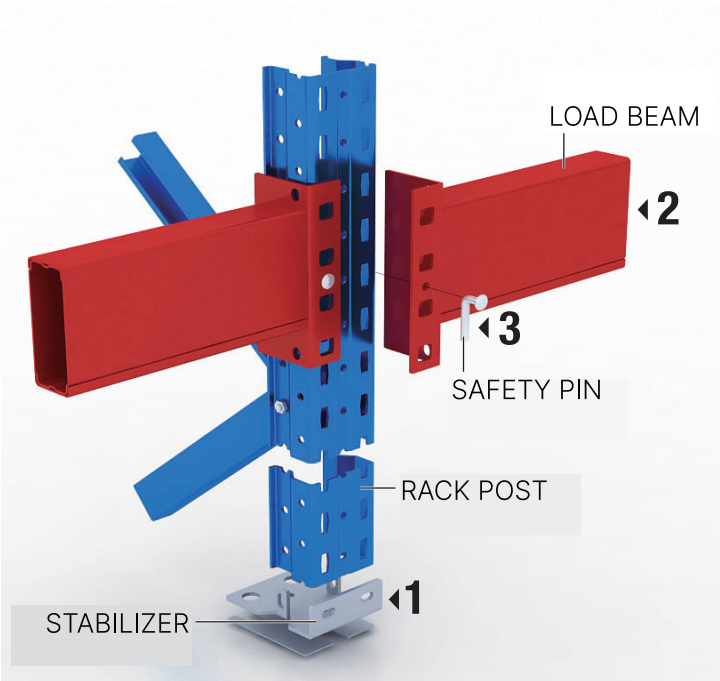
- Bolt assembly allows for easy dismantling and future layout changes.
- Simple disassembly and assembly of load beams make it easy for anyone to assemble.



PALLET RACK ADVANTAGES & FEATURES



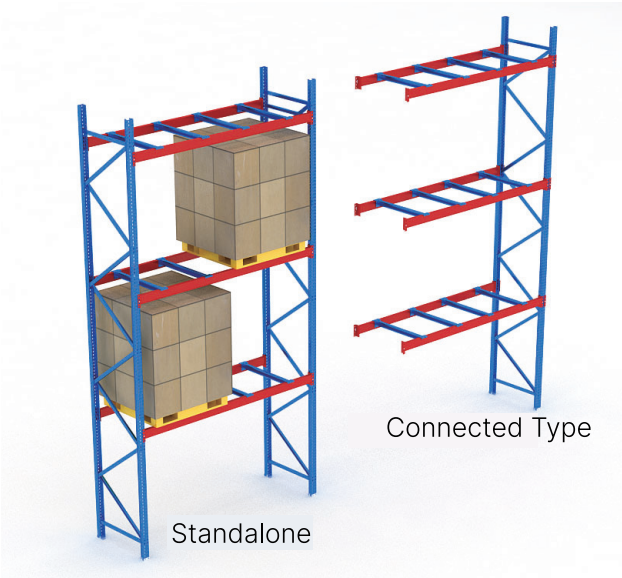
POST AND LOAD BEAM CONNECTION METHOD



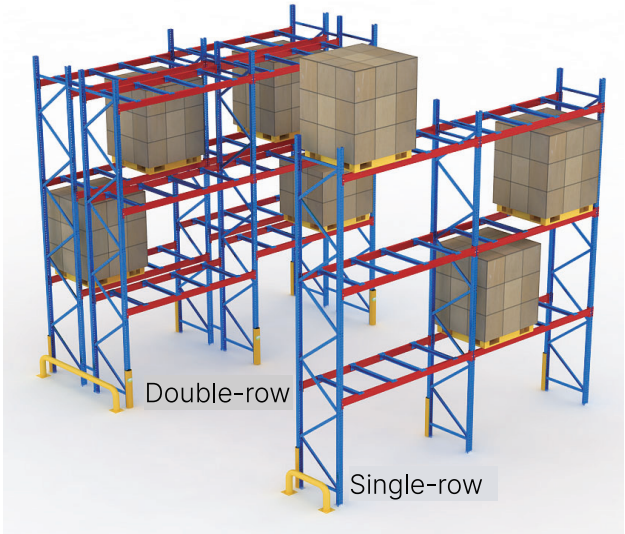
- 1 Install a stabilizer at the bottom of the post for stable support.
*Anti-corrosion zinc plating treatment
- 2 Connect the load beam bracket to the post hole.
- 3 Secure with a safety pin.

PALLET RACK STRUCTURE

- Standalone and Connected Types



- Single-row and Double-row



POST SPECIFICATION

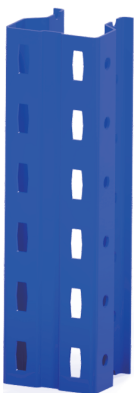
• POST

The post has a solid omega bar (Ω -BAR) shape to withstand lateral load, manufactured without seams by a molding machine, and is free of twisting, capable of resisting against vertical loads. The post has perfect rust prevention and an attractive electrostatic powder coating, effective for improving the working environment. Various colors are available for the post (powder coating).

* UNITS : mm



Post : 80*60
Pitch : 50mm
Hole : Hexagon



Post : 85*67
Pitch : 50mm
Hole : Hexagon



Post : 85*80
Pitch : 50mm
Hole : Hexagon



Post : 90*70
Pitch : 50mm
Hole : Waterdrop



Post : 100*67
Pitch : 50mm
Hole : Waterdrop



Post : 100*95
Pitch : 50mm
Hole : Waterdrop



Post : 120*95
Pitch : 50mm
Hole : Waterdrop



Post : 140*95
Pitch : 50mm
Hole : Waterdrop

• **LOAD BEAM**

The load beam is manufactured without seams by a molding machine, with a structure that can withstand more than the weight of the product (based on loading 2 pallets per level).
The load beam bracket is made with a clip system to prevent internal corrosion and enable height adjustment.

BOX LOAD BEAM

* UNITS : mm



MODEL **P100*50**
SIZE **100*50**
Explanatory **BOX TYPE**



MODEL **P110*50**
SIZE **110*50**
Explanatory **BOX TYPE**



MODEL **P120*50**
SIZE **120*50**
Explanatory **BOX TYPE**



MODEL **P130*50**
SIZE **130*50**
Explanatory **BOX TYPE**



MODEL **P140*50**
SIZE **140*50**
Explanatory **BOX TYPE**



MODEL **P150*50**
SIZE **150*50**
Explanatory **BOX TYPE**



MODEL **P160*50**
SIZE **160*50**
Explanatory **BOX TYPE**

STEP LOAD BEAM



MODEL **P60*50**
SIZE **60*50**
Explanatory **STEP TYPE**



MODEL **P76.2*50**
SIZE **76.2*50**
Explanatory **STEP TYPE**



MODEL **P80*50**
SIZE **80*50**
Explanatory **STEP TYPE**



MODEL **P88.9*50**
SIZE **88.9*50**
Explanatory **STEP TYPE**



MODEL **P101.6*50**
SIZE **101.6*50**
Explanatory **STEP TYPE**



MODEL **P114.3*50**
SIZE **114.3*50**
Explanatory **STEP TYPE**



MODEL **P127*50**
SIZE **127*50**
Explanatory **STEP TYPE**

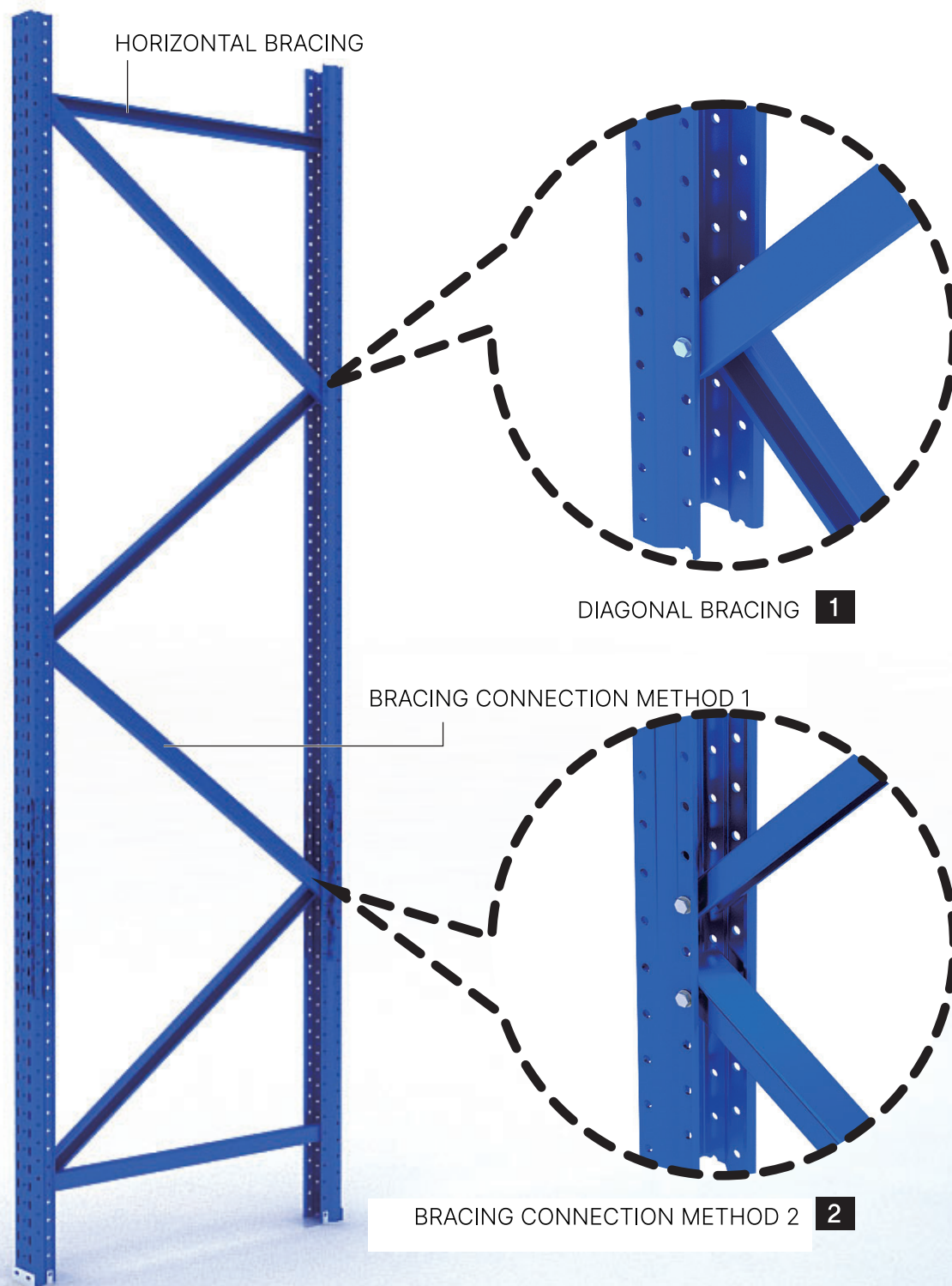


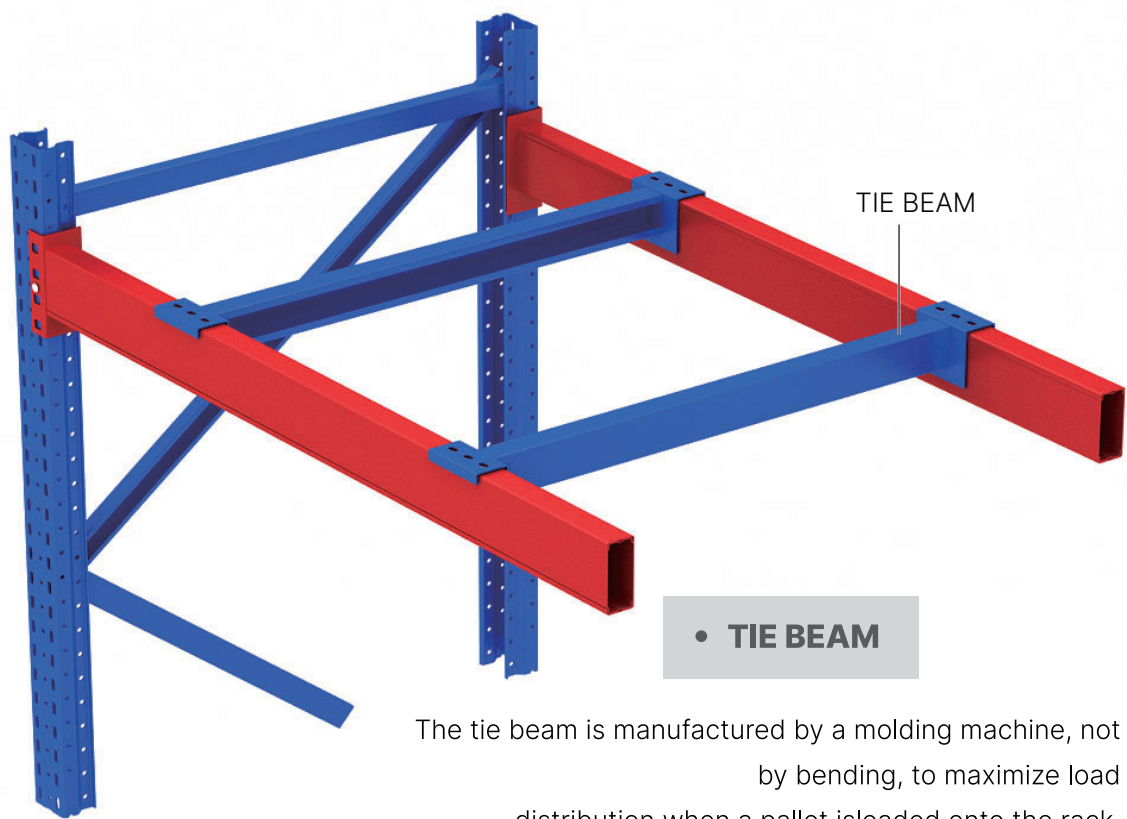
MODEL **P139.7*50**
SIZE **139.7*50**
Explanatory **STEP TYPE**

• RACK FRAME

The load beam is manufactured without seams by a molding machine, with a structure that can withstand more than the weight of the product (based on loading 2 pallets per level).

The load beam bracket is made with a clip system to prevent internal corrosion and enable height adjustment.

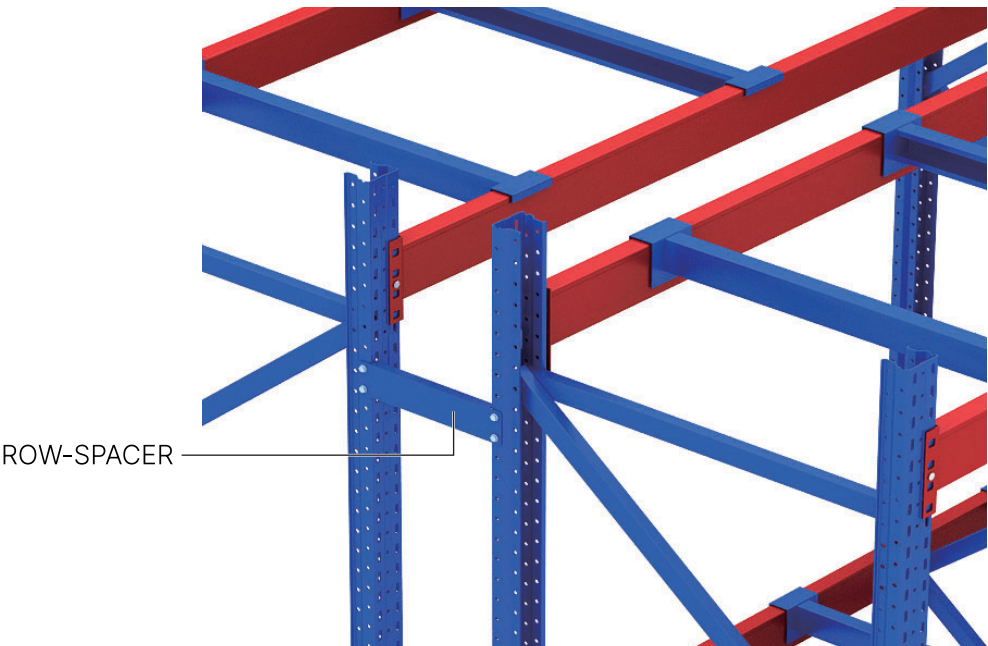




The tie beam is manufactured by a molding machine, not by bending, to maximize load distribution when a pallet is loaded onto the rack.

• ROW-SPACER

Used to connect racks in double-row configurations.



PALLET RACK CONFIGURATION

• RACK SIZE DETERMINATION CRITERIA

Pallet Rack Width (W) Determination Criteria

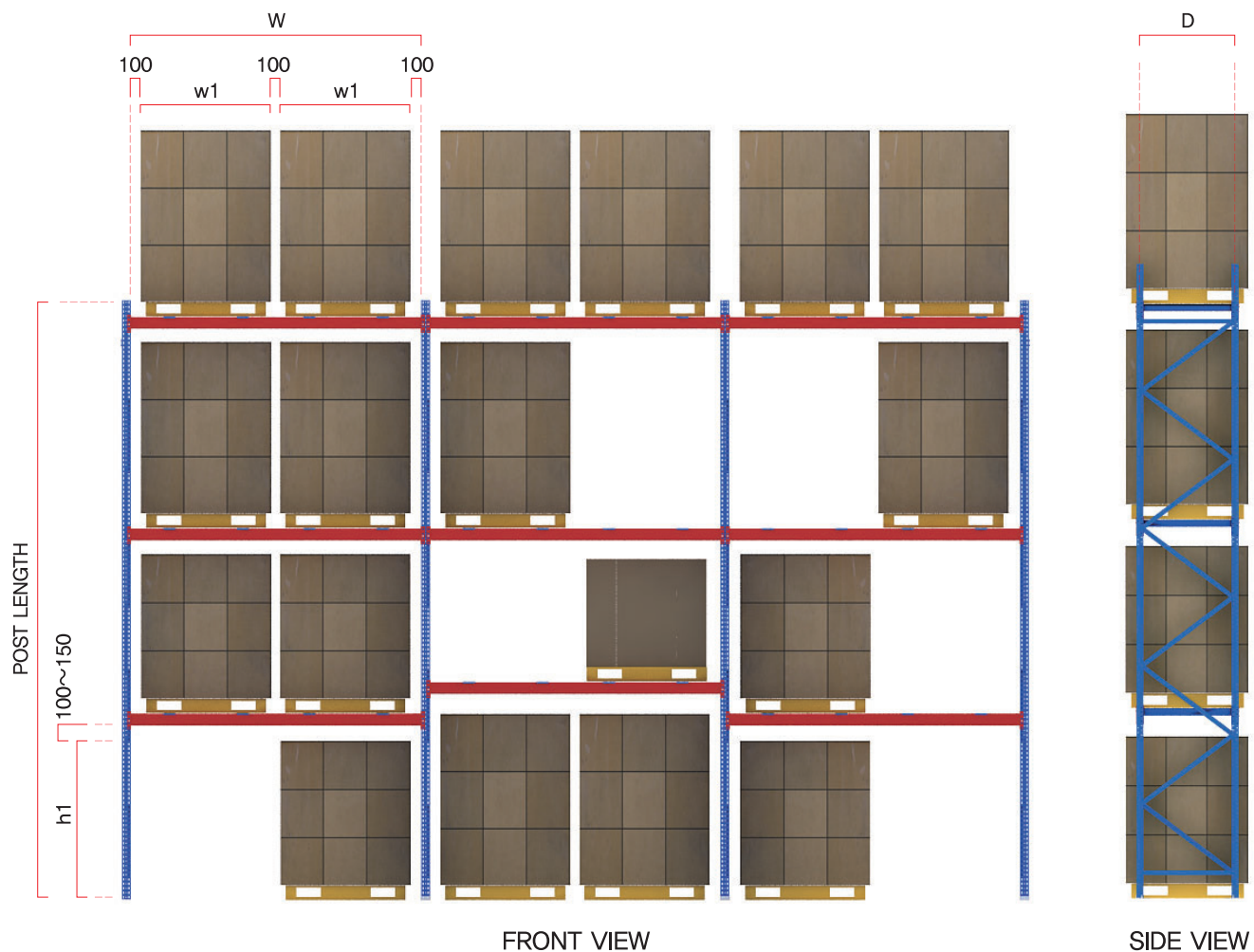
- Maximum width (w1) of pallet or cargo X number of pallets per level + clearance (A)

Beam Load Capacity Determination Criteria

- Number of pallets x load (kg) : load capacity (kg) per level

Frame Depth

- 100mm shorter than the depth of the pallet.



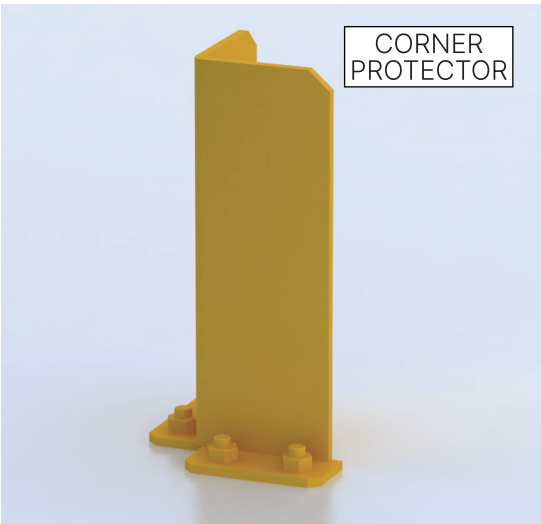
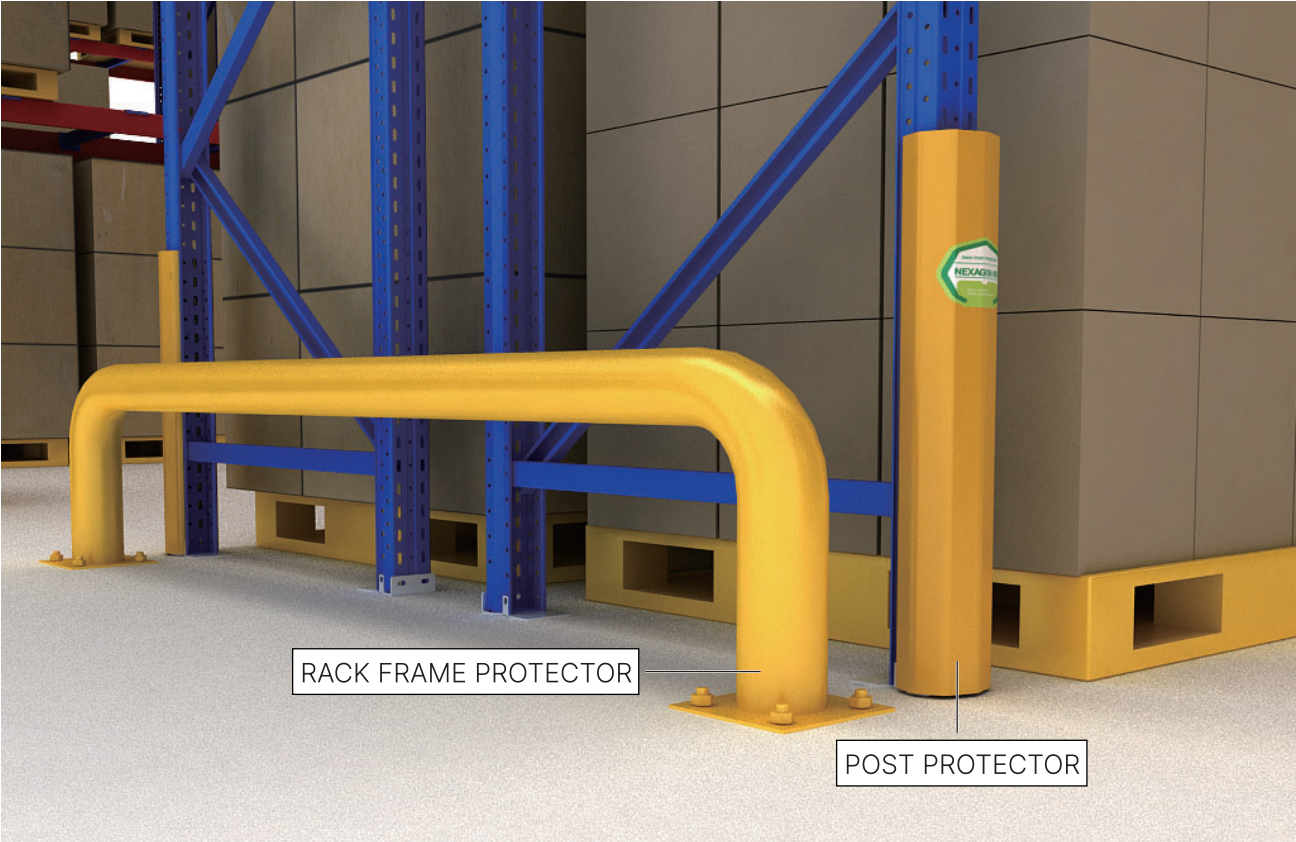
• CONFIGURATION CHECKLIST

- ☒ Load Size and Weight
- ☒ Forklift Type
- ☒ Inbound and Outbound Routes
- ☒ On-site Measurements

SAFETY EQUIPMENT

- RACK FRAME PROTECTOR / POST PROTECTOR / CORNER PROTECTOR

To prevent damage caused by collisions with forklifts or other vehicles, post protectors and safety guards are installed.



HIGH RACK / VNA RACK SYSTEM

HIGH RACK SYSTEM

The high rack system is an expanded version of the pallet rack, ideal for storing large quantities of palletized goods in buildings with extra height using a dedicated three-way forklift to reach higher levels. This system minimizes forklift aisles, maximizing space efficiency.





HIGH RACK FEATURES & ADVANTAGES

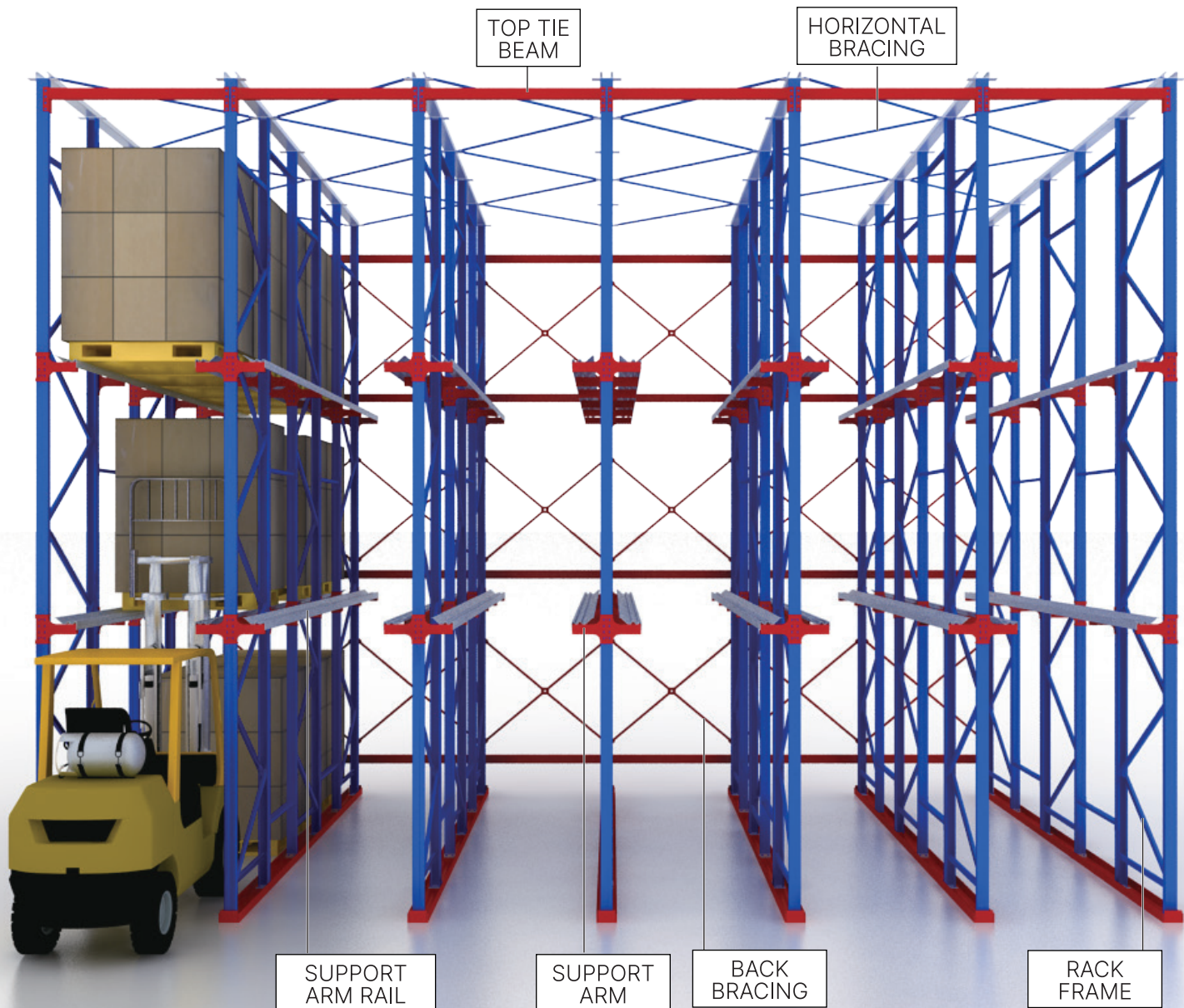
The high rack is compatible with any fork model, offers a wide range of specifications, and features high-quality components. Standard racks can be used up to 13 meters in height.

Maximum space utilization is achieved with minimum aisle width (using VNA equipment), significantly increasing storage efficiency. Storage at 2-3 times the height with about half the aisle width is possible compared to a regular pallet rack.

Careful consideration of the building floor's flat surface is required when installing a high rack. A strictly flat surface is required on the installation floor ($\pm 3\sim 5\text{mm}$).

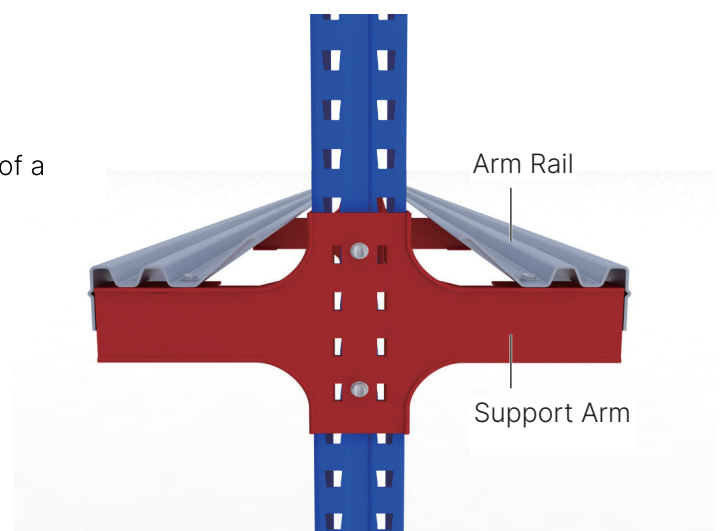
A building-style high rack system is available, where the rack itself forms the building's structural skeleton, and the roof and exterior walls are directly attached to the rack. This approach can reduce construction costs by about 20% compared to separate building and rack units, providing economic benefits.

DRIVE-IN RACK SYSTEM



DRIVE-IN RACK SYSTEM

The drive-in rack system allows forklifts to enter the rack to load items, making it suitable for storing large quantities of a limited variety of products.





DRIVE-IN RACK ADVANTAGES & FEATURES

The system can simultaneously solve forklift access routes and storage spaces.

Forklifts enter the space between racks to store items.

This system is optimal for managing goods with high production volume and low variety.

The drive-in rack is a first-in, last-out rack system.

By combining storage and access routes, the system achieves high storage efficiency.

For goods with low movement frequency, this system guarantees the highest space utilization efficiency.

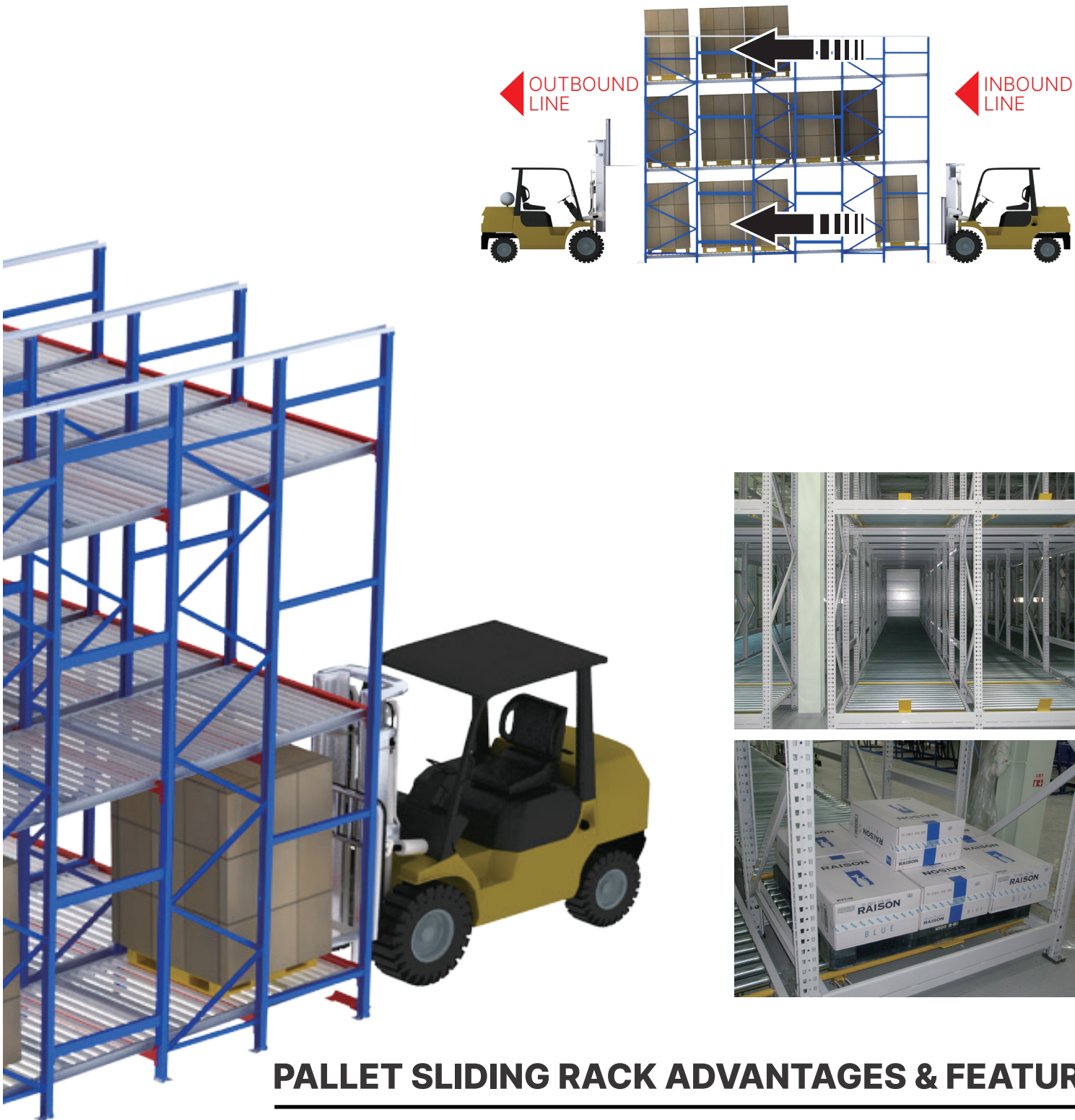


PALLET SLIDING RACK SYSTEM

PALLET SLIDING RACK SYSTEM

This system combines a rack conveyor with a rack, equipped with rollers on an inclined surface. Items automatically slide down due to gravity, and brake rollers and stoppers are designed to halt the pallets. With separate inbound and outbound sides, this system allows for efficient use of floor space and is ideal for storing products that require first-in, first-out management.





PALLET SLIDING RACK ADVANTAGES & FEATURES

The elimination of aisles between racks can save up to 50% of warehouse space.
The forklift's travel distance is reduced by up to 1/3.
Inbound and outbound operations are completely separated, resulting in a significant increase in work efficiency. Items are stored and retrieved on a first-in, first-out basis.
Inventory checks and visibility are easily facilitated, making warehouse management more efficient.

PUSH BACK SLIDING RACK SYSTEM



PUSH BACK SLIDING RACK SYSTEM

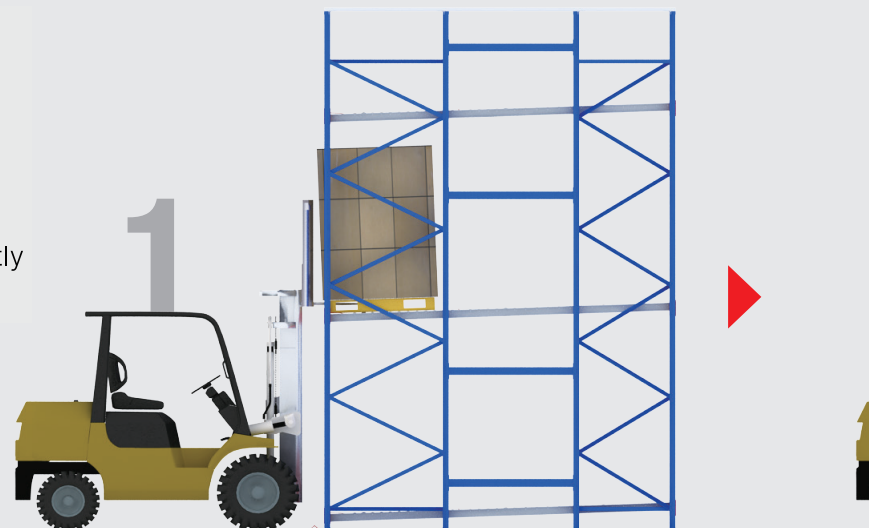
The push back sliding rack is a pallet flow rack system that utilizes gravity. Items are pushed in and retrieved using a building's interior space, making it a more efficient and economical storage system. It is especially effective for temporary storage of items waiting for shipment, in small spaces or for products with multiple deliveries of the same item, and for utilizing wall space.



CART TYPE PUSH BACK RACK
(MAX. Depth 6 Pallet)

• INBOUND AND OUTBOUND METHODS

- 1** The palletized cargo is loaded onto the first cart using a forklift.
- 2** The next item pushes the first pallet onto the next cart.
- 3** The last item pushes the previous one directly onto the rail.
- 4** For retrieval, items are unloaded in reverse order, and the items automatically move forward due to their weight.





PUSH BACK SLIDING RACK



PUSH BACK SLIDING RACK ADVANTAGES & FEATURES

Efficient Utilization of Space

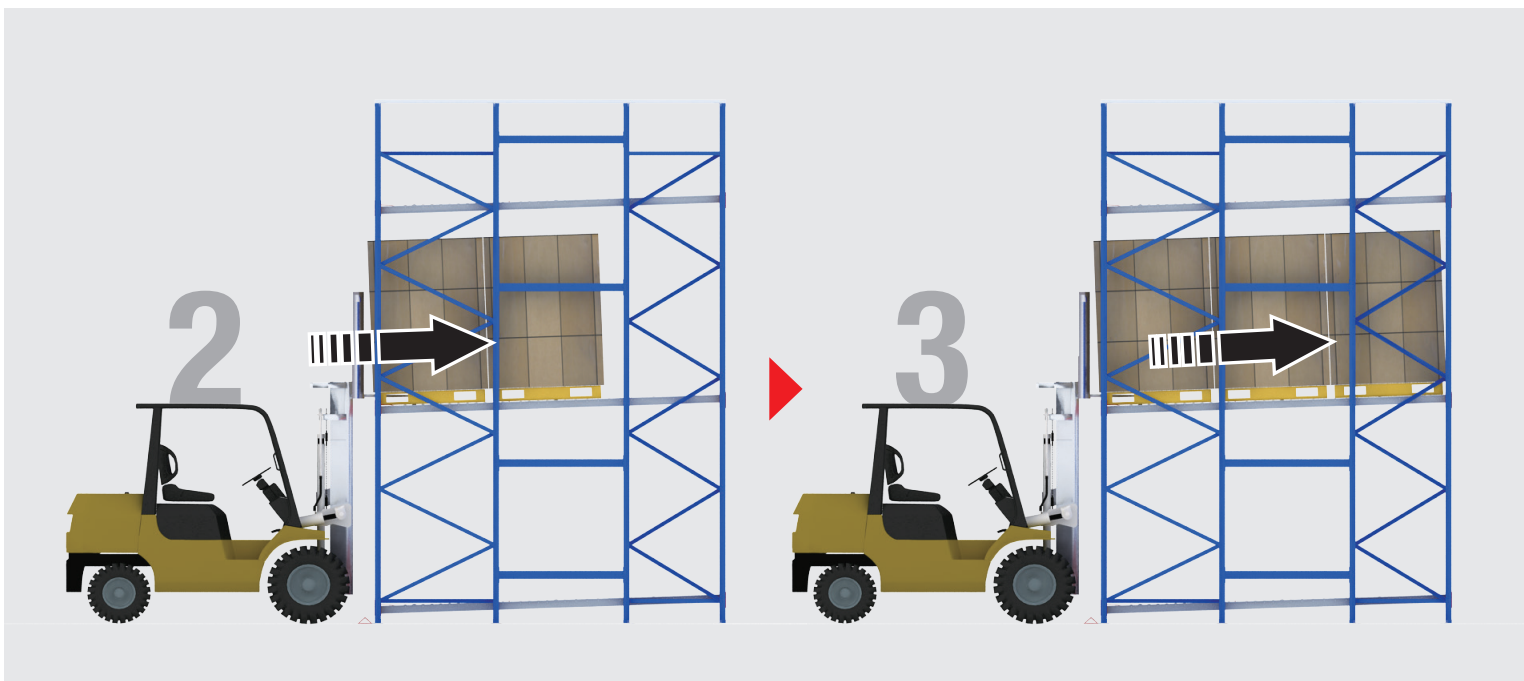
- Compared to pallet racks, the forklift aisle is reduced by 1/2 to 1/4, significantly reducing occupied space.

Efficient Wall Utilization

- Since the direction of inbound and outbound items is the same, wall space can be efficiently utilized.

PBS Rack (Push Back Sliding Rack)

- Can store up to 6 pallets, and brake rollers are installed in the first 1-3 slots to prevent damage to products due to acceleration during retrieval.



SAFETY

NEXAGON-901TM

PALLET RACK COLUMN COLLISION PROTECTION DEVICE FOR WAREHOUSES

Offers excellent performance for pallet rack protection.

- Excellent absorption and mitigation of external impacts on the front and sides
- Various color options and high visibility
- Applicable to various rack columns
- Innovative improvements possible with additional devices
- Can be installed on each level



The device is easy and simple to install without the use of anchors and fixing bolts due to its strong grip.

- No structural damage caused by forklift collisions breaking concrete anchor bolts
- Easy and simple detachment by hand without tools
- Saves maintenance costs and replacement time



Examples of installation and collision accidents with existing products

- Difficult installation and maintenance with anchor-type devices
- High installation and maintenance costs
- Items getting caught on rack column protectors during loading and unloading
- Difficulty in immediately identifying collision accident scenes



Forklift collision accidents are important safety issues in logistics warehouses.

Ministry of Land, Infrastructure, and Transport [Warehouse Storage Rack Safety Management Manual]

• Storage Rack Risk Factors

- Accidents can occur when goods fall due to corrosion, damage to the rack from exceeding maximum load capacity, poor loading of goods, or improper rack connections, damaging products or injuring nearby workers.

• Storage Rack Risk Factors

- Install protection devices at the bottom of the rack to withstand minor impacts or collisions caused by mobile equipment such as forklifts.

*** Pallet rack columns are not designed to be safe from collisions caused by forklifts.**

“ Our NEXAGON-901™ product has been developed to fit internationally recognized rack brands and is continuously being developed to fit most rack sizes. ”

[Patent Registration No. 10-1449678]

* For more information on different sizes, please visit our company website or contact us.

