

HEAVY DUTY RACKING SYSTEMS

pg. 45 - pg. 85

ideal for space





Selective Pallet Racking System

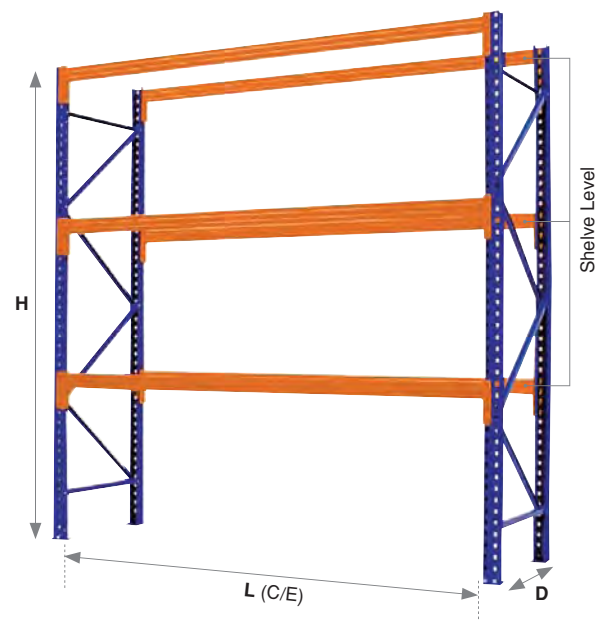
Heavy Duty Racking Systems



TTF Selective Pallet Racking System is constantly in demand by all warehousing facilities requiring palletized storage and handling. The system allows instantaneous access to store articles without incurring load crushing.

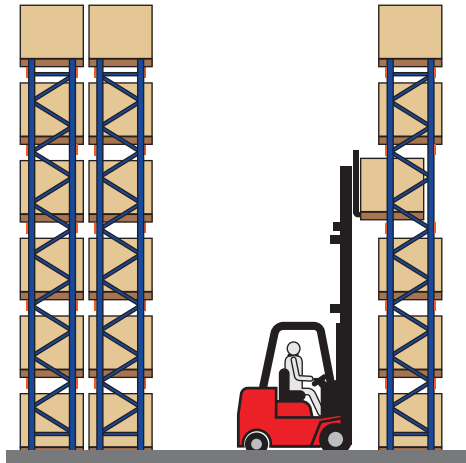
The **TTF Selective Pallet Racking System** offers an excellent stock rotation function and only uses 40% of warehouse floor space. With a maximum uniformly distributive load (UDL), the **TTF Selective Pallet Racking System** is able to withstand loads from 1000kg ~ 3000kg. Effective, economical and flexible, **TTF Selective Pallet Racking System** is the solution to increase warehouse productivity.

The **TTF Selective Pallet Racking System** can be setup in single and double-sided runs to suit all forklift and hand pallet trucks. Depending on aisle width and maximum load height, **TTF Selective Pallet Racking System** offers a low start-up solution. The **TTF Selective Pallet Racking System** is packed with features for maximum versatility. With features like drum stoppers and frame guards, the system meets strict safety requirements of today's modern warehouse.



Dimension: Height x Depth x Length x Shelve Level x Bay (W/O Plywood)

Height (mm)	900	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900	4200	4500
	4800	5100	5400	5700	6000	6300	6600	6900	7200	7500			
Depth (mm)	450	600	750	900	1000	1200	1500						
Length (mm) C/E	900	1200	1350	1500	1800	2100	2400	2700	3000	3300	3600		
Shelve Level	2	3	4	5	6	(Available customize)							
Decking Material	Bay (Without Plywood)												
Loading Capacity (kg)	1000 kg - 3000 kg UDL / level												
Colour	Beam ■ ■ (optional)							■ Frame Set					





Selective Pallet Racking System

Heavy Duty Racking Systems



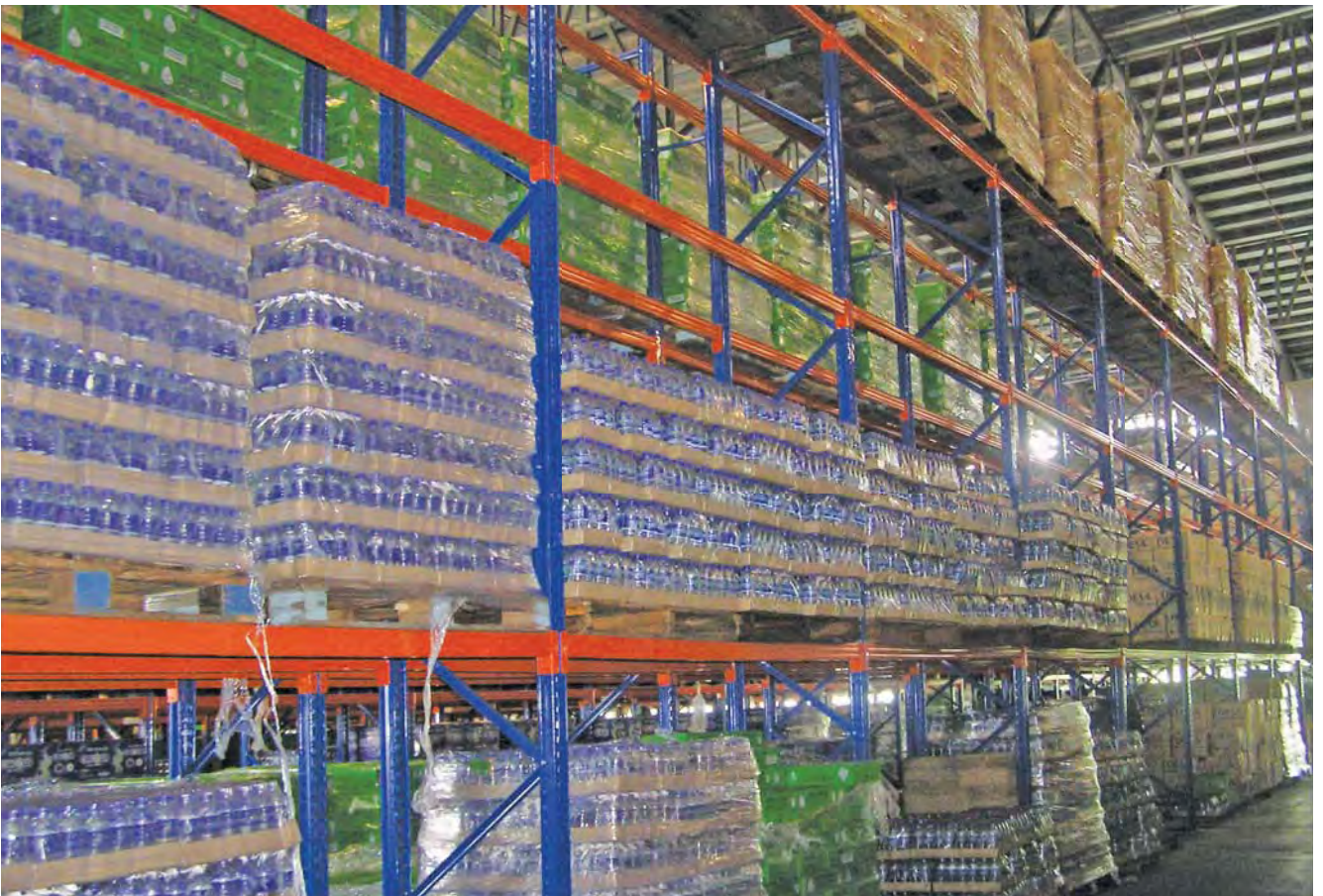
Galvanized Upright Post



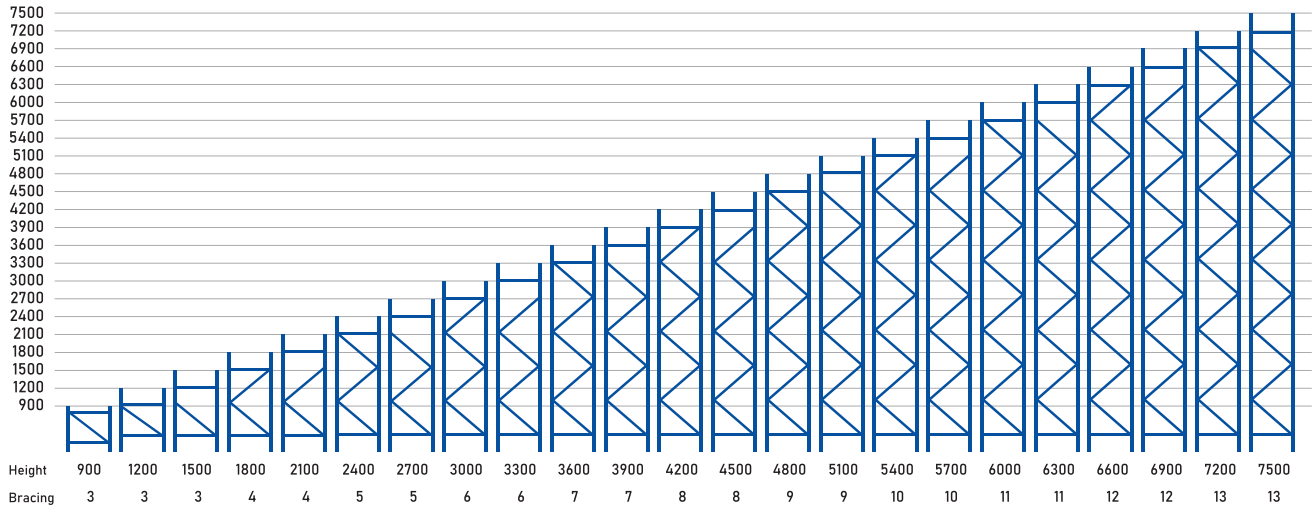


Selective Pallet Racking System

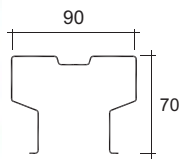
Heavy Duty Racking Systems



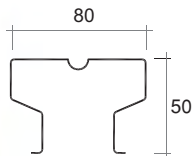
Heavy Duty Frame Set Height (mm)



Upright Post

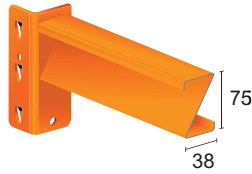


UP 90x70

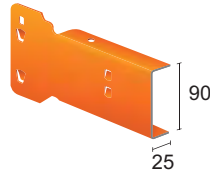


TP 80x50

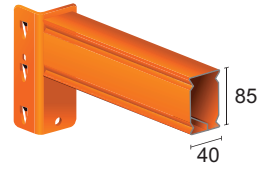
Box Beam Profile



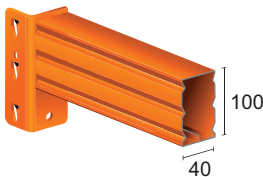
OUZB 38x75



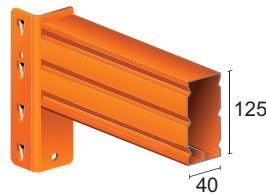
OUCB 25x90



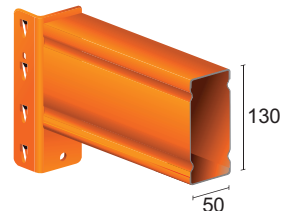
OUBB 40x85



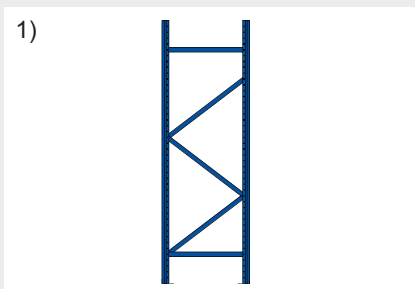
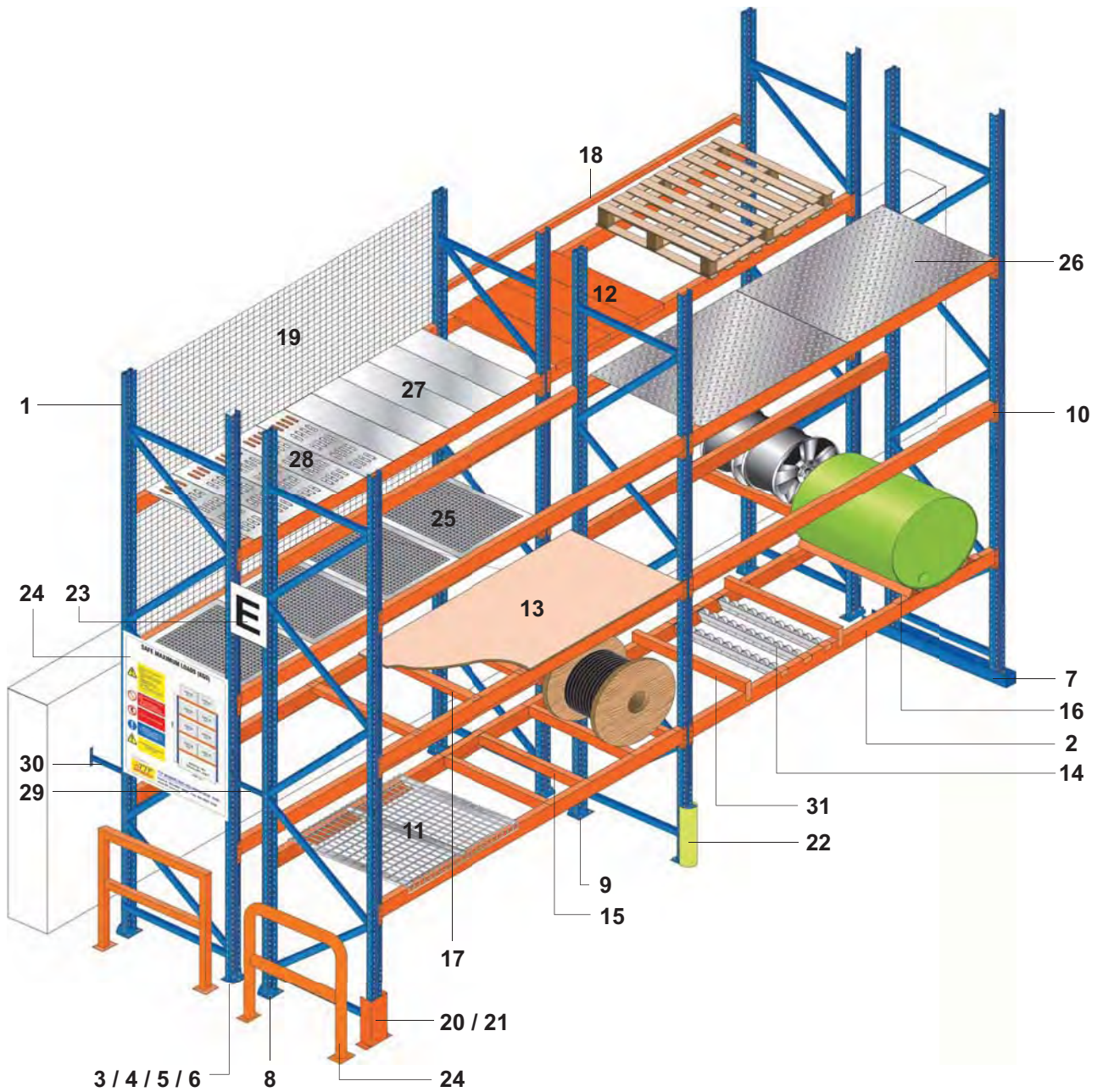
OUBB 40x100



OUBB 40x125



OUBB 50x130



UP Frame Set



Box Beam



UBP Base Plate



TBP Base Plate



HBP Base Plate



CBP Base Plate



C-Channel Base Plate



Levelling Plate



PJ Anchor



Safety Pin



Mesh Decking



Heavy Duty Metal Shelve



HDF Board / Plywood / Cement Board



Placon Roller



Sport Rlm Stopper



Drum Stopper



Heavy Duty Center Support



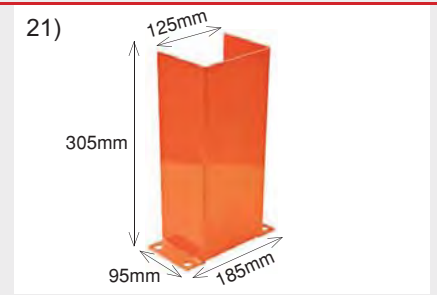
Pallet Stopper



19) Mesh Fencing



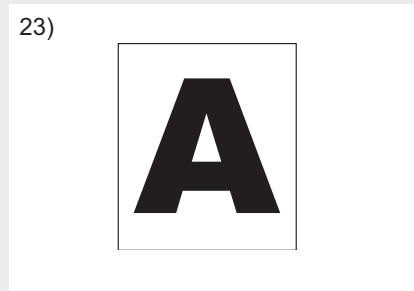
20) O Frame Guard (Type A)



21) O Frame Guard (Type B)



22) Rack Armour



23) Row Sign



24) Safe Load Notice



25) Steel Grating



26) Chequer Plate



27) Metal Floor Plain



28) Perforated Metal Floor Plain



29) Frame Joint



30) Wall Joint



31) Heavy Duty Divider

OSBP 900x1000x2P



OSBP 900x2300x3P



Standard Barrier Protector

Product code	Dimension H x L (mm)	SHS size (mm)	No. of Pole
OSBP 900x1000x2P	900 x 1000	50 x 50	2
OSBP 900x2300x3P	900 x 2300		3

OHBP 900x1000x2P - A



OHBP 900x2300x3P - A



OHBP 900x1000x2P - B



OHBP 900x2300x3P - B



Heavy Duty Barrier Protector

Product code	Type	Dimension H x L (mm)	Pipe Diameter (mm)	No. of Pole
OHBP 900x1000x2P	A B	900 x 1000	Ø75	2
OHBP 900x2300x3P	A B	900 x 2300		3

OHBP 600x1000x2P - A
OHBP 600x2300x2P - A



OHBP 600x1000x2P - B
OHBP 600x2300x2P - B



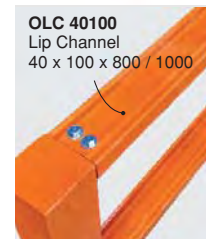
Barrier Protector

Product code	Type	Dimension H x L (mm)	Pipe Diameter (mm)	No. of Pole
OHBP 600x1000x2P	A B	600 x 1000	Ø75	2
OHBP 600x2300x2P	A B	600 x 2300		

ODBP 900x1000x2P



ODBP 900x2300x3P



Detachable Barrier Protector

Product code	Dimension H x L (mm)	Size of SHS (mm)	No. of Pole
ODBP 900x1000x2P	900 x 1000	100 x 100	2
ODBP 900x2300x3P	900 x 2300		3



Heavy Duty Shelving System

Heavy Duty Racking Systems

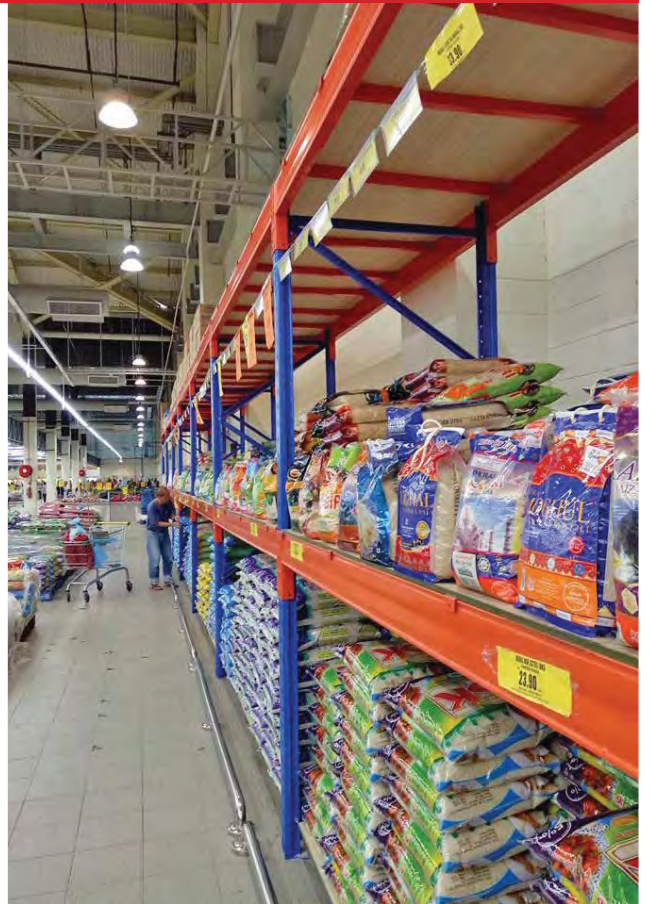


Specifically constructed and designed for tough loads between 1000kg ~ 3000kg UDL, heavy capacity warehouses can now look towards our range of **Heavy Duty Shelving System**. Our own innovation, the box beam increase loading capacity of the **Heavy Duty Shelving System**, the versatility of the box beam bracket enables easy installation and dismantling according to customer application.



Dimension: Height x Depth x Length x Shelf Level x Decking Material

Height (mm)	900	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900	4200	4500
	4800	5100	5400	5700	6000	6300	6600	6900	7200	7500			
Depth (mm)	450	600	750	900	1000	1200	1500						
Length (mm) C/E	900	1200	1350	1500	1800	2100	2400	2700	3000	3300	3600		
Shelve Level	2	3	4	5	6	(Available customize)							
Decking Material	12mm High Density Fiber Board / Plywood / Metal Shelve												
Loading Capacity (kg)	1000 kg - 3000 kg UDL / level												
Colour	Beam ■ ■ (optional)							Frame Set ■					





Twin-bay Racking System

Heavy Duty Racking Systems



Twin-bay C/W Top Flooring



TTF Twin-bay Racking System was conceptualized as a cost saving system. With the application of our unique bracing system, the **Twin-bay Racking System** offers double the storage capacity and warehouse storage efficiency. The **Twin-bay Racking System** is made to withstand loads between 1000 kg ~ 3000 kg UDL.



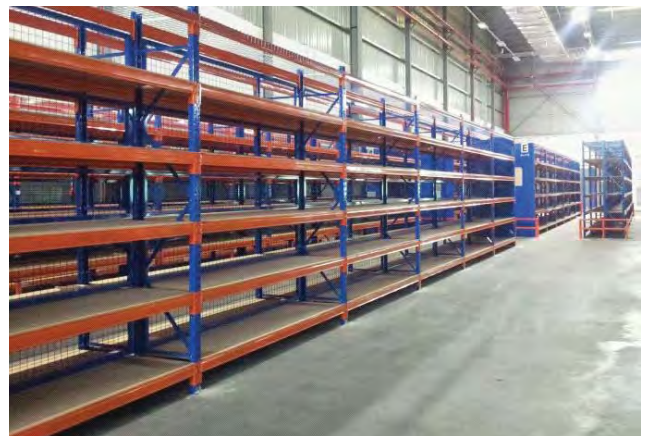
Multi-tier Twin-bay C/W Top Flooring



Twin-bay Racking System

Heavy Duty Racking Systems







Narrow Aisle Racking System

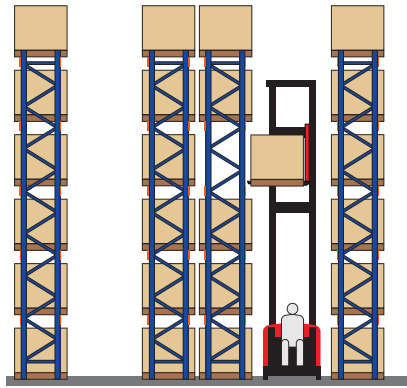
Heavy Duty Racking Systems



TTF Narrow Aisle Racking System provides high density storage while still allow individual access to all pallets. It's serve by special designed handling equipment: combination order pickers and turret truck or stacker cranes. It's needed to manoeuvre in the narrow aisle between the racks and aisle are marginally wider than the special truck, thus it guided along the aisle and do not turn to retrieve or deposit a pallet. The mast or fork head rotates to left or right as required. These system come into their own where only a limited floor space but store a large volume of stock and pallet.



Combination Order Picker & Turret Truck





Double Deep Racking System

Heavy Duty Racking Systems

Due to high-emphasis on safety required throughout racking systems, **TTF** have developed the **Double Deep Racking System**. **TTF Double Deep Racking System** was designed to store 2 pallets deep or 4 pallets deep in a double entry rack to suit most warehousing conditions. With a floor utilization capacity of 60%, this system offers optional storage accessories for awkward and non-standard loads. It gives 50% immediate accessibility and an average stock rotation performance.

Scan the QR code for **Product Video** in our facebook page.

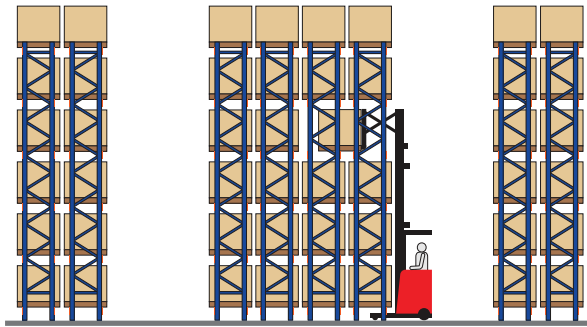


English



Chinese





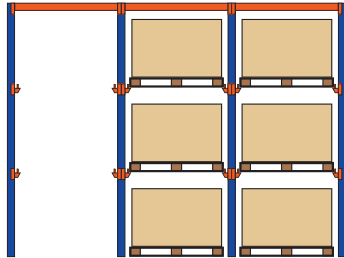
Galvanized Upright Post

Drive-in Racking System

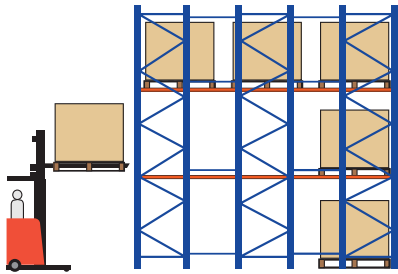
Heavy Duty Racking Systems



TTF Drive-in Racking System allows long term storage of same size goods. The design allows forklift trucks to be driven right into the centre of the block between any uprights on the front face for pallet retrieval. This is made possible because the design does not need cross beams that will block entry. The pallets are supported on the front to back edges by continuous rails cantilevered from the upright at each pallet level. Stock rotation is poor with a floor utilization capacity of 65%. Again, **TTF** versatility in fabricating rack systems according to customer required specifications make the **Drive-in Racking System** a formidable business solution. All safety aspects and product load specifications are formulated by 3D CAD software to suit customer's need.



FRONT VIEW



SIDE VIEW





Heavy Duty Shelving C/W Mezzanine Floor

Heavy Duty Racking Systems



TTF innovative Heavy Duty Shelving C/W Mezzanine Floor is a 2-in-1 solution in today's world where space is a premium. Perfect for commercial or industrial locations, the design optimizes vertical space and offers instant access to stock handling. The system is a rack supported structure with versatile multi-tier application. The mezzanine floor system gives industry leaders an option to add an additional floor for staff upgrade and storage needs.





Heavy Duty Shelving C/W Mezzanine Floor

Heavy Duty Racking Systems



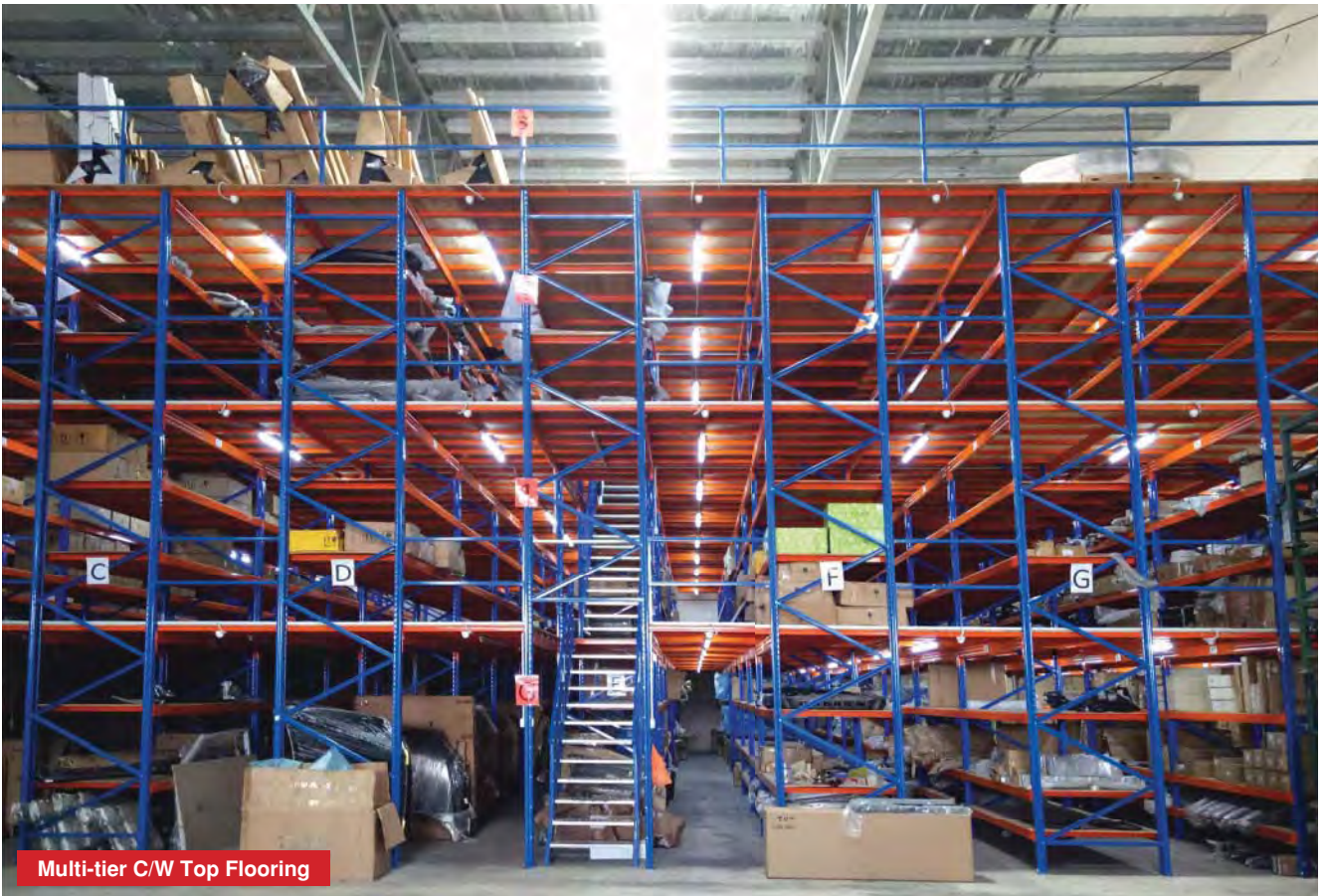
Multi-tier C/W Top Flooring



Mesh Fencing



Perforated Metal Floor Plain



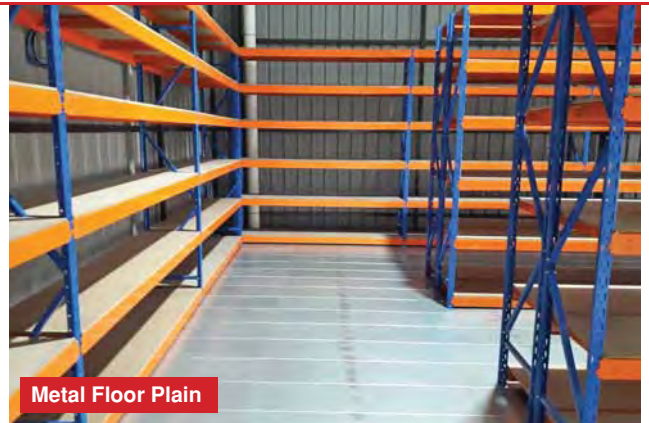


Heavy Duty Shelving C/W Mezzanine Floor

Heavy Duty Racking Systems



Steel Grating



Metal Floor Plain



Plywood / HDF Board



Cement Board



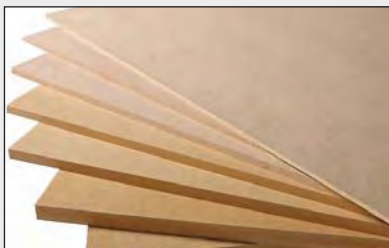
Perforated Metal Floor Plain



Steel Grating



Decking Material



HDF Board / Plywood



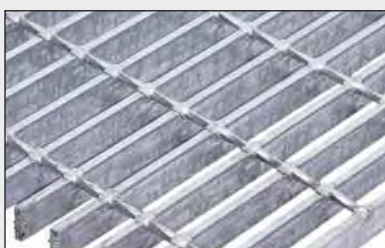
Cement Board



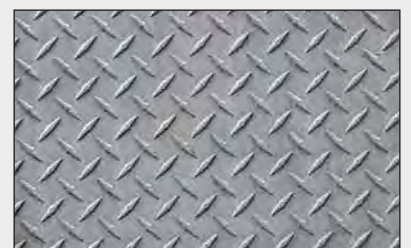
Metal Floor Plain



Perforated Metal Floor Plain



Steel Grating



Chequered Plate



Cantilever Racking System

Heavy Duty Racking Systems

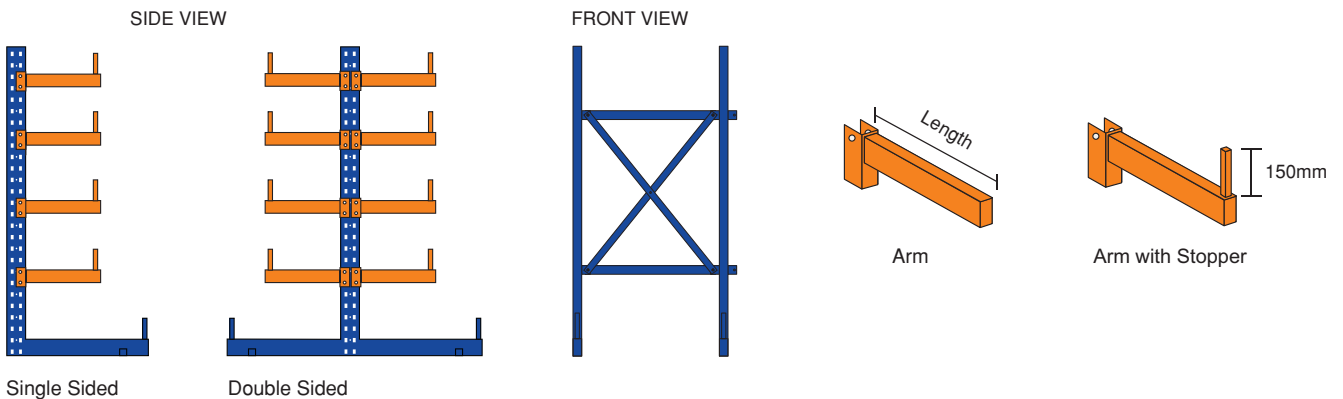


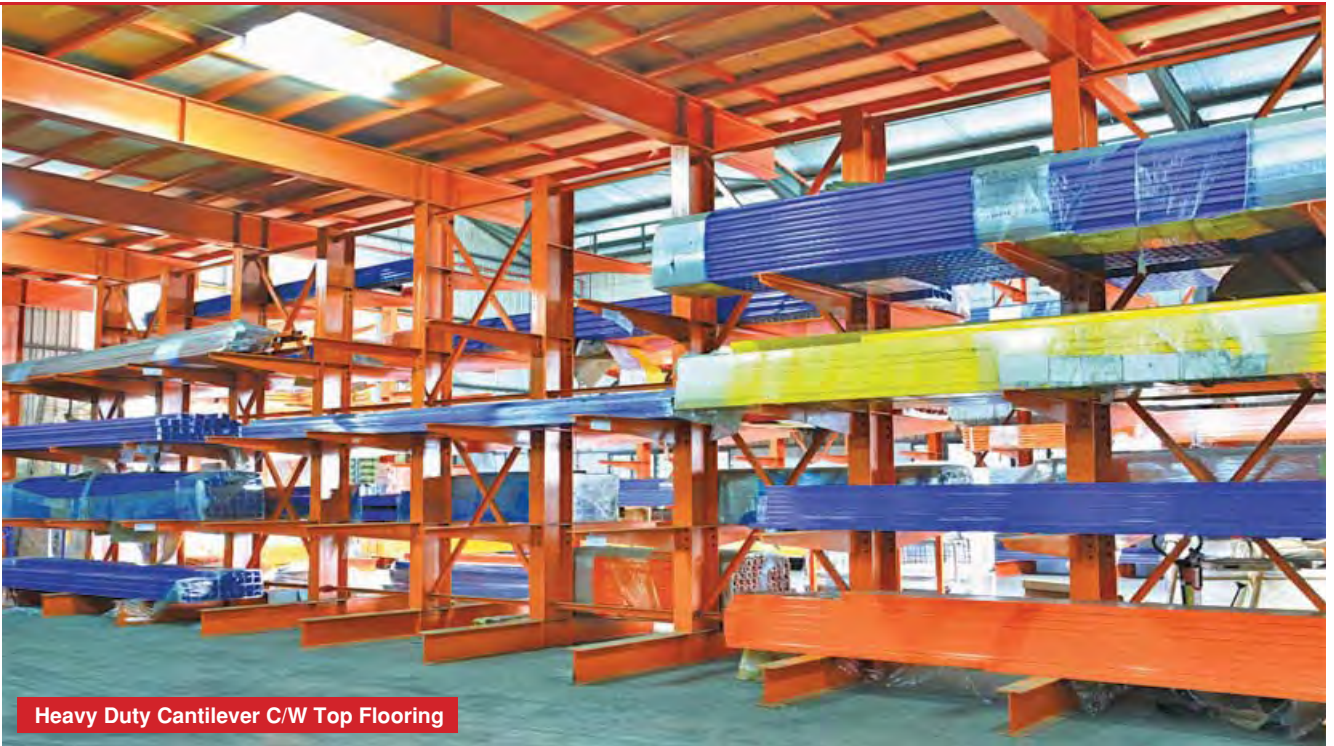
Dimension: Height x Width x Arm Length x Level

Height (mm)	1800	2100	2400	2700	3000	3300	3600
Depth (mm)	700	800	950	1000	1100	1200	
Length (mm)	600	750	900	1200			
Loading Capacity (kg)	100 kg - 500 kg UDL / level						
Colour	Bracing			Arm			

Remarks: medium duty specifications

This system allows storage of long-length stock and is perfect for outdoor or indoor of goods facilities and work sites. **TTF Cantilever** accommodates the need for quick and easy height and width positioning of goods. A flexible solution for both double-sided and wall access applications, the system is an economical solution for storing long bars, wood, tubes, pipes and etc. Permanent stopper on storage arms ensure easy loading and safe goods storage. The cantilever arms can be placed at suitable levels for maximum utilization of vertical space.





Heavy Duty Cantilever C/W Top Flooring



Heavy Duty Cantilever Mezzanine



Medium Duty Single Sided Cantilever (100kg - 500kg)



Cantilever C/W Metal Shelving Plate with Divider



Universal Beam Heavy Duty Single Sided Cantilever (1000kg above)



Racking System Mezzanine Floor

Heavy Duty Racking Systems



TTF Racking System Mezzanine Floor was designed with simplicity and efficiency in mind. The Racking System Mezzanine Floor is made-up of SHS column and box beam type primary beam for life time safety and peace of mind. The system is ideal for maximum space usage to increase company profitability. Easily installed and dismantled without the need for on-site welding.







Truss System Mezzanine Floor

Heavy Duty Racking Systems



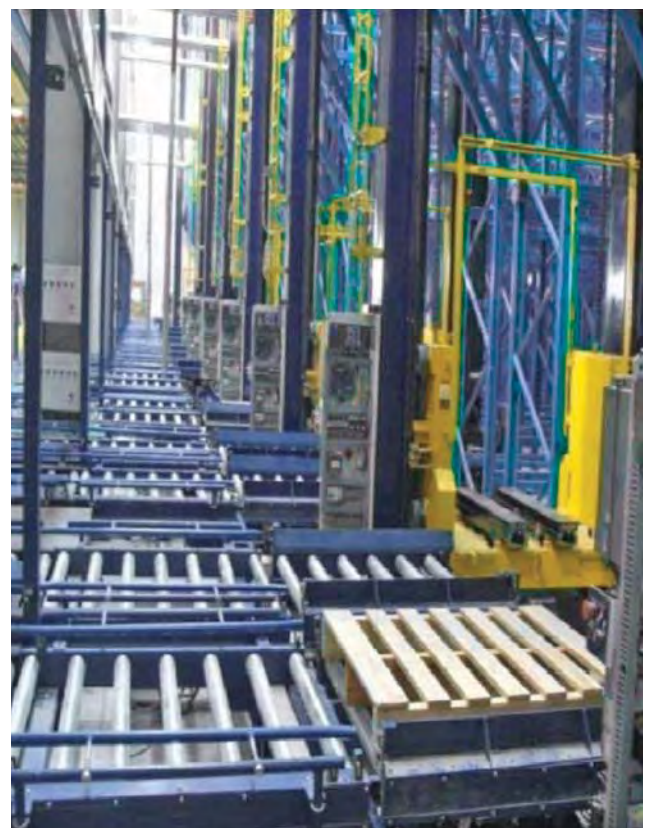
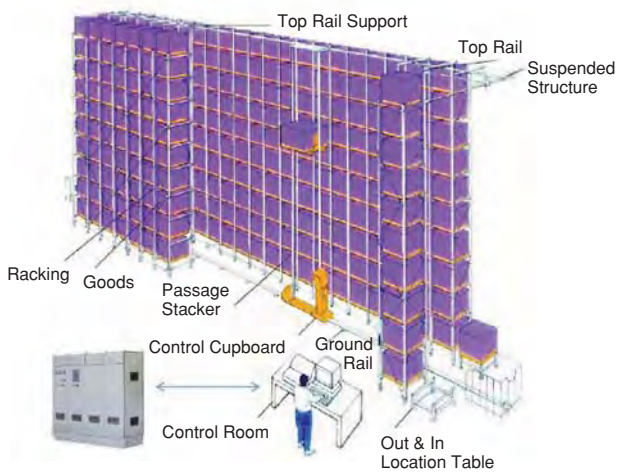
TTF Truss System Mezzanine Floor was designed with simplicity and efficiency in mind. The **Truss System Mezzanine Floor** is made-up of SHS column and Truss type support beam for life time safety and peace of mind. The system is ideal for maximum space usage to increase company profitability. Easily installed and dismantled without the need for on-site welding.



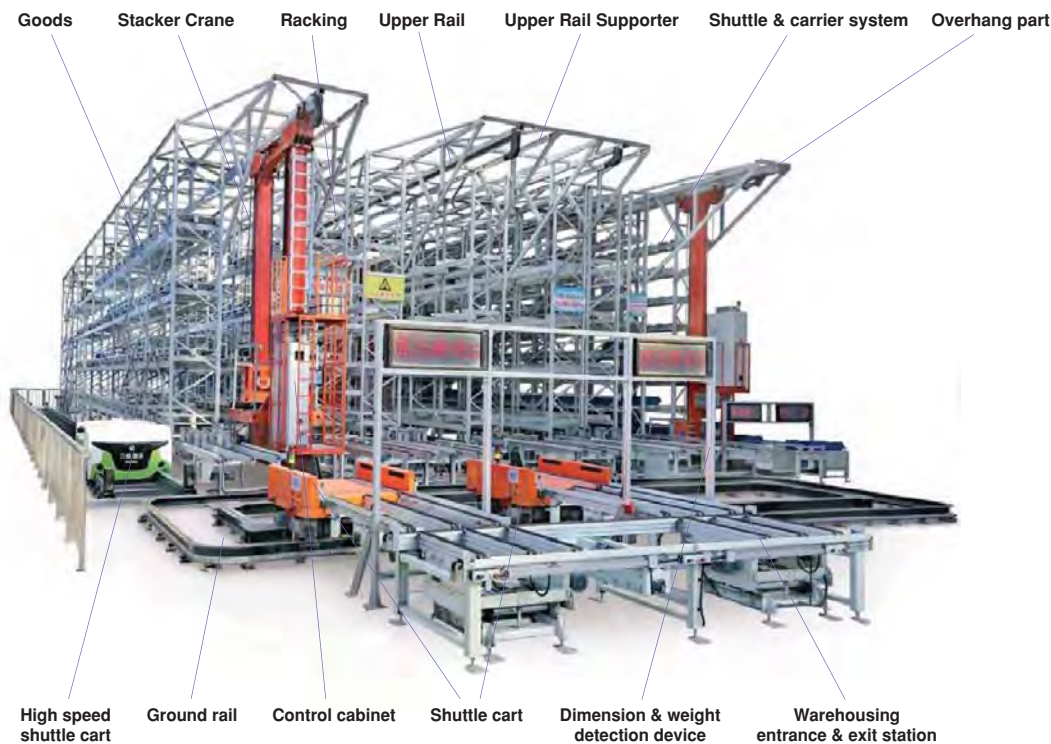




TTF AS/RS System consists of assembly racking and welding racking. Complimented by passage stackers, conveyor system and computer control system, it guarantees the fullest space utilization, handling mechanization and storage management modernization.



Custom Design System



Planning Stage

Custom design for warehouse layout and spacing optimization blueprint by site visits and technical discussions.

Designing Stage

ASRS components technical selection by engineers in engineering division to meet customer requirements.

Manufacturing Stage

Manufacturing of selected components according to configured mode and design drawings.

Installation Stage

Assemble, install & debug of mechanical structure and electrical control system at customer site.

After Sales Stage

Technical support / services at site and remote online maintenance by professional engineers at your requests.

Design Highlights



Racking System

- Optimized sectional design
- High quality steel material
- Pitch adjustable 75mm upright
- Strengthen by bolts & nuts
- High intensity & good stability
- Epoxy powder coated surface



Stacker System

- Operation control mode - Computer monitoring & controlling system
- Operator schema - Online auto / Manual / Maintenance mode
- Auto address mode - Laser / Rolling / Barcode addressing / Communication mode - Infrared / Wireless



Stacker Crane

- Single / Double mast structure
- Stable & reliable operation
- Vector frequency driver
- Encoder position controlling
- Real time tracing of pallets
- Touch screen easy operation



Conveyor System

- Roller conveyor
- Chain conveyor
- Lift & transfer conveyor
- Palletizing conveyor
- Depalletizing conveyor
- AVG lane conveyor
- Shuttle lane conveyor

ASRS Concept Structure

- Beams/ Bracket type racking with high steel quality for whole assembly structure.
- Steel pallet to load goods with strong loading capacity and better rigidity.
- Main components of racking being manufactured in high precision production.
- Installation done by certified engineers and technicians at site.

ASRS Benefit Highlights

- ✓ High storage density degree vs space.
- ✓ Increased variety of goods stored.
- ✓ Micro warehouse cells stock check.
- ✓ Maximum store space utilization.
- ✓ High rise warehouse structure.
- ✓ Minimum land space utilization.
- ✓ High automatic operational speed.
- ✓ Minimum manual stock handling tasks.
- ✓ Minimum stock damages and losses.
- ✓ Application for Industry 4.0 implementation.
- ✓ Interface syncing with mainframe ERP / SAP.
- ✓ Auto database logs and ISO reporting formats.
- ✓ Real time inventory management.
- ✓ Increased inventory stock accuracy.
- ✓ Increased warehouse overall efficiency.
- ✓ Short ROI period of approximately 2 to 3 years.
- ✓ High rate of increased operation efficiency.
- ✓ Skilled workers development via technology.

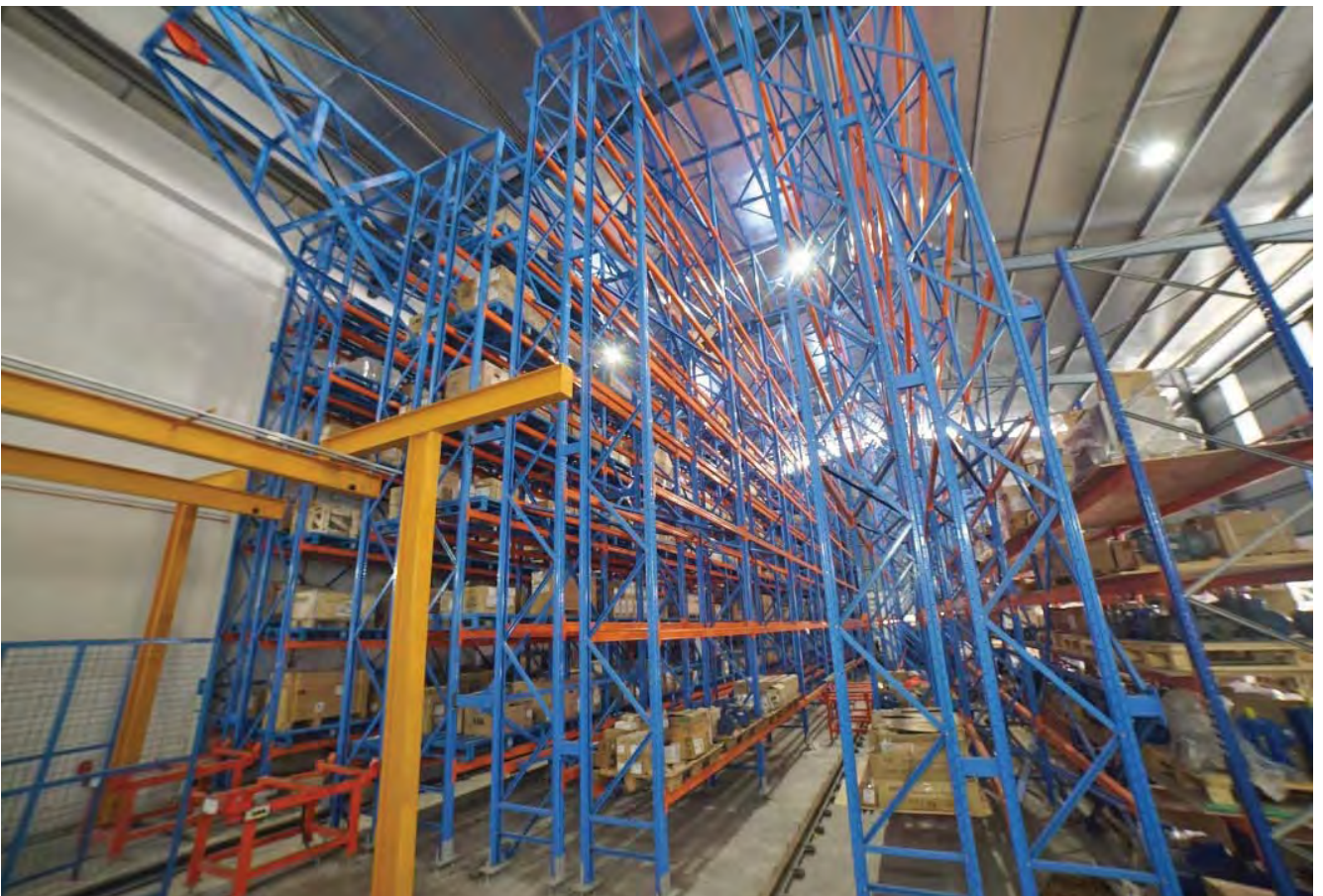


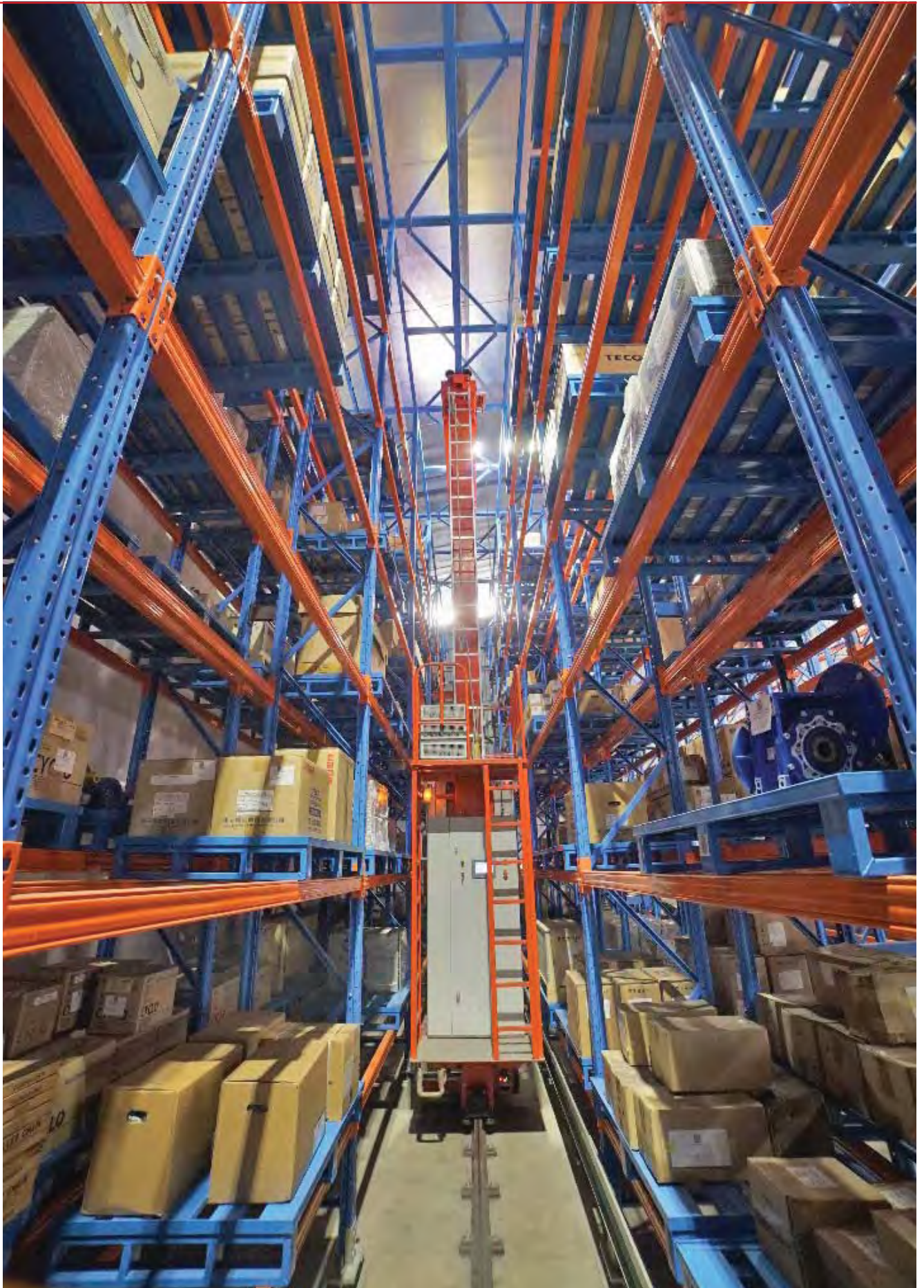
Scan the QR code for **Product Video** in our facebook page.



Automated Storage & Retrieval System (ASRS)

Heavy Duty Racking Systems







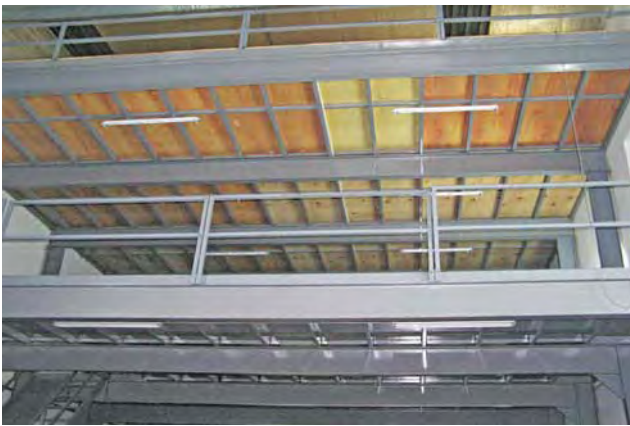
Steel Platform

Heavy Duty Racking Systems



With an extremely popular trend of utilizing critical space by architects and builders, **TTF Steel Platform** provides the missing link to space-saving puzzles. Extremely strong and meeting all building safety requirements, the Steel Platform is a popular choice for many applications in permanent warehousing, medium scale factories and even amusement park application. Our **Steel Platform** design is built with a solid universal beam that is longer, requiring less column supports. Top flooring can be made of plywood or mild steel plate.







Steel Platform

Heavy Duty Racking Systems

