





YOUR PARTNER

FOR FUTURE INTRALOGISTICS NEEDS



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FOREWORD BY GROUP MD

Dear Valued Customers,

I am thrilled to introduce our latest catalog featuring our comprehensive range of racking systems. Our team has worked tirelessly to bring you the highest quality products that are designed to make your business more efficient, organized, and profitable.

At Prestar Storage System Sdn Bhd, we understand that having the right storage solutions is crucial to the success of your business. That's why we offer a wide variety of racking systems, including pallet racking, cantilever racking, mezzanine flooring and more. Our products are designed to maximize your storage space while maintaining the highest level of safety and durability.

We take pride in our commitment to innovation and excellence, and we are always looking for new ways to improve our products and services. Our team of experts will work with you to understand your specific needs and provide customized solutions that are tailored to your business.

In this catalog, you will find a range of products that are designed to meet your storage needs, no matter the size or complexity of your operation. From small warehouses to large distribution centers, we have the right racking systems to meet your requirements.

Thank you for choosing Prestar Storage System Sdn Bhd as your storage solutions partner. We are committed to providing exceptional customer service and support, and we look forward to helping you optimize your storage space and increase your productivity.

Sincerely,

Dato' Toh Yew Peng

Group Managing Director

WHAT IS **PALLET RACKING?**



In any developing country/society, the issue of land scarcity or the challenges of maximizing one's space utilization is very common to hear off. As such the common and budget worthy solution for one to consider is the using of Storage Equipment, e.g. Pallet Racking.

Pallet Racking is a material handling storage aid system designed to store palletized or loose items. It is available in various varieties in order to suite for all types of storage needs. The usage of Pallet Racking has allowed for the storage of palletized materials in horizontal rows with multiple levels and with the main aimed increasing ones storage density.

To create the ideal pallet racking system, several considerations should be taken into account:

- Desired storage density
- Floor space and building height
- Placement of building doors and columns
- Inventory accessibility
- Inventory rotation
- Item/load size and weight
- Optimal storage design
- Cost of materials and installation



BEFORE INSTALL PALLET RACKING:



AFTER INSTALL PALLET RACKING:







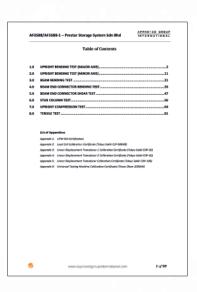
CERTIFICATIONS Verification Certificate from TUV

The decision in choosing the right Racking System can be detrimental and can post a very long-term good or bad effect. While most primary concerns is to opt for something that fit into your budget range, it would be wise for one to choose a the Racking System that has being designed and manufactured in accordance to International Design and Safety Standard. MYSTAR Racking and Shelving System conform to International Codes of Practice as recommended below.

- British Standard EN 15512: 2009 Steel Static Storage System Adjustable Pallet Racking System (Principles for Structural Design)
- ii. EURO Standard EN 15620: 2008 Steel Static Storage System Adjustable Pallet Racking System (Tolerances, Deformations & Clearances)
- iii. British Standard BS5950-1: 2000 Structural Use of Steelwork in Building Part 1: Code of Practice for Design -Rolled and Welded Sections
- iv. Rack Manufacturers Institute (2008 Edition) Specification for the Design, Testing & Utilization of Industrial Steel Storage Racks
- v. Storage Equipment Manufacturer's Association (SEMA): 1980 Code of Practice for the Design of Static Racking







Other than conform to the International Design and Safety Standard, Prestar Storage System Sdn Bhd also dedicated to upholding the highest quality standards, as evidenced by our successful implementation of ISO 9001:2015. This certification showcases our commitment to rigorous quality management, ensuring consistency, efficiency, and a customer-centric approach across our organization.





WARRANTY and PRODUCT LIABILITY INSURANCE

We are so confident with our product qualities that we have offered a Manufacturing Defect Warranty and Product Liabilities Insurance with worldwide coverage for our products.

RACKS MAINTENANCE AND SAFETY TIPS FOR A WAREHOUSE RACKING SYSTEM

PROPER INSTALLATION

It is crucial to engage professional installers experienced in industrial racking systems. They will ensure the system is correctly assembled, anchored, and aligned, following manufacturer guidelines and local building codes. Professional installation minimises the risk of structural issues, ensures load-bearing capacities are respected, and guarantees the system's overall safety and functionality.

PROPER LOAD DISTRIBUTION

Maintain proper load distribution on the racking system to ensure stability and prevent damage or accidents. Follow the weight capacity guidelines provided by the manufacturer and avoid overloading individual racks or specific sections.

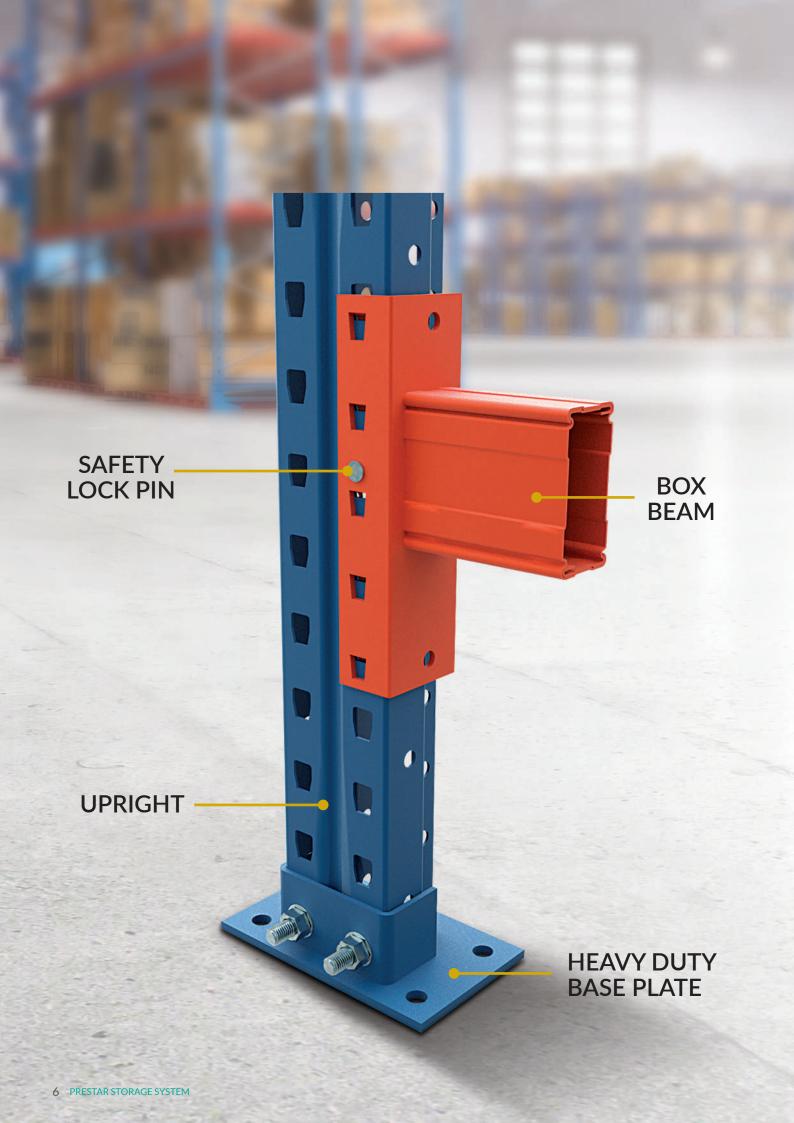
SAFE USAGE PRACTICES

Train your staff on safe and efficient racking usage practices. Emphasise the importance of properly loading and unloading items, using appropriate lifting techniques, and avoiding excessive force or impact when handling pallets.

REGULAR MAINTENANCE AND INSPECTION

Implement a regular maintenance schedule for your industrial racking system. Inspect important components like upright frames, beams, connectors, and baseplates. Assess the system's structural integrity for damage such as cracks, weld failures, or misalignments. Additionally, check that weight limits are not exceeded on each level and complying with the manufacturer's guidelines.

Other than provide racking system to the warehouse, Prestar Storage System Sdn Bhd also offers racks maintenance services for optimal rack functioning. The skilled team addresses potential issues and racks maintenance with a service fee covering labor and replacement parts if needed.

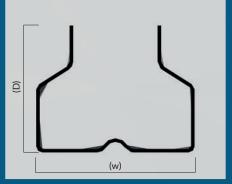


RACKING MAJOR COMPONENTS

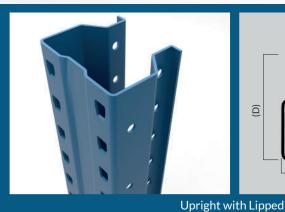
UPRIGHT

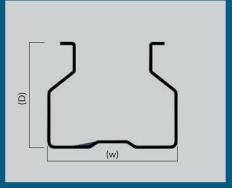
i. For Heavy Duty Racking System





Dimensions
90mm (W)
100mm (W)
120mm (W)
150mm (W)







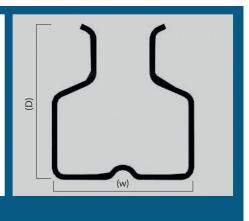
UPRIGHT

ii. For Medium Duty System

Upright without Lipped







LS500 Upright

LS500 Upright with Special Side Hole

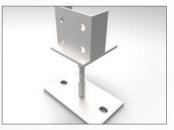
BASE PLATE



Heavy Duty Baseplate



Standard Duty Baseplate



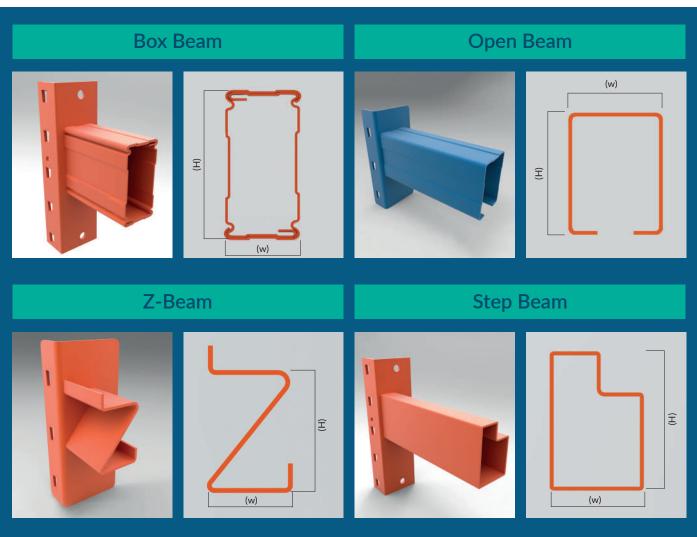
Adjustable Baseplate



Upright with Adjustable Baseplate

i. Type of Beams for Heavy and Medium Duty System





COMPONENTS FOR AUTOMATED STORAGE SYSTEM

Industry 4.0 Revolution has transformed the way companies manufacture, distribute and store their products. Internet of Things (IoT) and Automation have been introduced throughout the process and operations, as per when it's applicable.

In line with these advancements, our teams have designed, manufactured and installed racking systems tailored to meet specific requirements such as below:

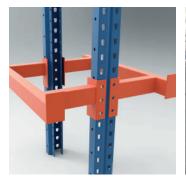








1) Pallet ASRS - Beams with Top Hat for Single or Double storage capacity.





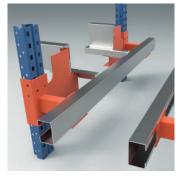




2) Pallet ASRS - Multi Deep with Shuttle System has been designed to accommodate High Density and low SKUs storage capacities.









3) 4-Ways Shuttle System that suite perfectly for medium-rise warehouses and building for high density storage as well. This system installed rails within the racking system to allow the shuttle cart move horizontally along the racking system for storing and retrieval of stored pallets, containers within the racking system. This has resulted in another level of work efficiency and storage automation into ones operation storage space for goods.

TYPE OF INDUSTRIAL RACKING SOLUTIONS



Selective Pallet Racking System



Double Deep Racking System



Shuttle Racking System

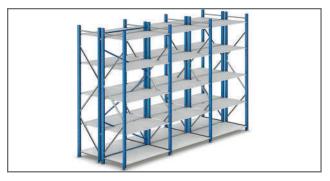


Automated Storage & Retrieval (AS/RS) System

TYPE OF CARTON STORAGE SOLUTIONS



Multi-tier Racking System



Longspan Shelving System

TYPE OF SPECIFIC STORAGE SOLUTIONS





Very Narrow Aisle (VNA) Racking System



Drive-In Racking System



Pallet Flow System



Cart Push Back



Boltless Shelving System



Carton Flow System





This is the most commonly used racking system for storing multiple locations and 100% selectivity. This system offers the most economical, efficient storing and retrieval of pallets. It is believed that this is the most cost-effective and adaptable storage solutions for one to start with.

FEATURES:

- The most commonly used for storing palletized unit loads.
- Stores full pallets in single deep rows and up multiple levels.
- Support First In First Out (FIFO) operation using single aisle access for storage and retrieval of pallets.
- Each pallet can be access individually.

ADVANTAGES:

- 100% accessibility to each pallet.
- High visibility on stored goods.
- Similar pallet types are unnecessary.



- Requires large space in the warehouse.
- Use up 40% of facility area only for aisle space.
- The higher the volume of product, the higher the storage cost.





Double Deep Pallet Racking is designed to store 2 pallets deep, which consist of two standard Selective Racks, set up back to back. This system has to be used with double deep reach truck with pantograph or extension fork attachment.



FEATURES:

The most commonly used for storing palletized unit loads.

- Stores full pallets in double deep rows and in multiple levels.
- Support Last In First Out (LIFO) operation using single aisle access for storage and retrieval of pallets.
- Each pallet can be access individually.

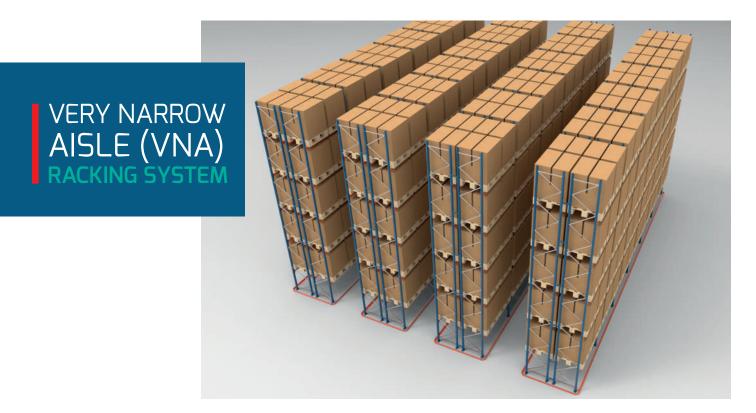


ADVANTAGES:

- High accessibility to the pallet which make it easier to load and unload.
- High visibility of the stored goods.
- Similar pallet types are not necessary.



- Storage height is limited to 10mts for safe operations.
- Lower throughput rates since speed of pallet access is reduced.
- Poor visibility of rear storage pallet for upper level for order pickers or truck drivers.



Very Narrow Aisle (VNA) Racking System is designed to provide high-density storage with 100% selectivity. The design of VNA Racking System allows pallets to be stored with high density volume. The pallets can assessed with Turret Truck (VNA truck), operate on floor guided by rails or wire induction and it can lift pallets up to 14 meter high. Save up to 50% more space than standard reach truck.

FEATURES:

- It is designed to completely maximize warehouse storage capacity.
- It is a high storage capacity with unrestricted access to pallets.
- The pallet can be accessed with Turret Truck which known as VNA Truck.
- VNA Truck operates on floor guided by rails or wire induction and it can lift pallets up to 14 meter high.
- Can save up to 50% more space by using VNA truck compared to standard
- reach truck.

ADVANTAGES:

- 100% accessibility to each pallet.
- High visibility on stored goods.
- Similar pallet types are unnecessary.

- Requires the use of special forklift equipment e.g. VNA Truck.
- Lower flexibility since need to have a VNA truck to function properly.









This is the most preferred solution to conventional block stacking where pallets simply cannot be stacked on top of each other. It is effective in optimizing the warehouse storage and thus reducing the number of working aisles. Ideally such storage systems are suitable for storage of homogenous products with no Time or Date sensitive.



FEATURES:

- It is suitable for storing large quantities and small varieties.
- Optimize the warehouse storage by reducing the number of working aisle.
- Product is rotated in Last In First Out (LIFO) operation because of the single entry point.
- Suitable for storage of homogenous products with no time or date sensitive.



ADVANTAGES:

- High storage density.
- Space optimization by eliminating aisles between racks.
- Suitable for a large number of homogenous products.



- Low selectivity because of the single entry point.
- Time and date sensitive.
- Limited visibility of stocked pallet.





Shuttle Rack System is considered as an improvisation of conventional Drive-In Rack System. The main difference with Drive-In System is the storing and retrieving of pallets in and out of the racks was via a semi-automated shuttle cart. Similarly as Drive-In, Shuttle Racking System are very suitable for storage of batch quantities for homogeneous product.

FEATURES:

- Improvisation from conventional Drive-In Rack System.
- It is designed for the use of a shuttle machine.
- Carry loading and unloading tasks optimally and at a faster speed.
- Automatic and manual operations controlled by a remote using Wi-Fi network.
- Semi-automated and high density storage solution for the handling goods inside the channel.

ADVANTAGES:

- Smart control of inventory due to sensors installed in the shuttle which enables to identify the empty space in storage shelves.
- Minimizing the risks of accidents and damage within the channel.
- It can operate in cold temperatures as low as -25 °C to 0 °C and as well as at ambient temperature.

- Require a good Wi-Fi Connection.
- Investment cost and maintenance cost is high.
- High requirements on the accuracy of the racks, guide rails and the floor.











For Automated Storage and Retrieval System (AS/RS) are storage solutions using stacker cranes or other similar automated mechanisms for placing and retrieving loads from a defined storage location.



FEATURES:

- A computer and robot aided system that can retrieve items or store them in specific locations in the warehouse.
- Consists of shuttles, cranes, carousels, vertical lift modules (VLM) and other systems.



ADVANTAGES:

- Improved accuracy, efficiency and productivity.
- Minimal handling time thus make it very suitable for operations with high throughput.
- Extremely high inventory storage density solutions due to the storage can be up to the highest level of the warehouse.



- Requires having regular equipment maintenance.
- Substantial changes to the warehouse infrastructure and layout.
- Staff needs to be trained to use the system where it may lead to downtime or lower while training take place and during user adaptation period.



A pallet flow racking system is a warehouse storage solution that utilizes inclined roller tracks to allow for seamless movement and quick retrieval of pallets. By utilizing gravity, this system promotes efficient inventory rotation and is ideal for high-density storage of perishable goods or time-sensitive inventory. It can be operate with both FIFO and LIFO system to maximizes productivity while reducing labor costs for inventory management.

FEATURES:

- Works in exactly the same way as carton live storage except on a much bigger scale.
- Combination of elevated rails and dynamic components (wheels, rollers) within the structure.
- Can operate with Last in First Out (LIFO) and First In First Out (FIFO).
- Flow created by loading action and gravity with no extra energy consumptions.
- Any size and shape of pallet can be handled.

ADVANTAGES:

- Reduced damaged goods since no forklift can enter the system.
- Minimal maintenance and reliable.
- No energy consumption because the flow created by loading action and the gravity.

- Requires high quality of pallet.
- More expensive compared to Drive-In and Push Back Racking due to the rollers fits into the racking.











The cart push back racking system is a dynamic storage solution designed to optimize space utilization in warehouses. This system allows carts to be pushed back on a nesting cart along inclined rails, providing high-density storage for palletized goods. With its gravity-based design, products are easily accessible, facilitating efficient stock rotation. It maximizes storage capacity as it have 2 to 4 deeps of storage making it an ideal solution for businesses looking to increase storage capacity.



FEATURES:

- Accessible by Last In First Out (LIFO) operation.
- Fully operational in freezers and coolers.
- Allows pallets to be stored from 2 to 4 deeps on either side of an aisle.
- Contains a pair of inclined rails and a series of nesting carts which rides on these rails.



ADVANTAGES:

- Reduce the time during unloading process.
- Shorten loading and unloading time of the pallet since forklift travelling distance is reduced.
- Higher storage density than other form of racking.



- Poor pallet accessibility because of the one access entry.
- Each pallet requires it own cart.
- Poor pallet visibility at top rear of the rack.



Multi-Tier Racking System (MTR) is a mezzanine that is design and built via the pallet racking or shelving system. It can be the most efficient and economical method to create extra floor space within the building area compounds. Depending on the load design and requirements, a MTR System height can be maximized up to building's ceiling height.

FEATURES:

- A mezzanine that is design and built via pallet racking or shelving system.
- Various levels can be easily accessed by stairs.
- It can be maximized up to building's ceiling height.

ADVANTAGES:

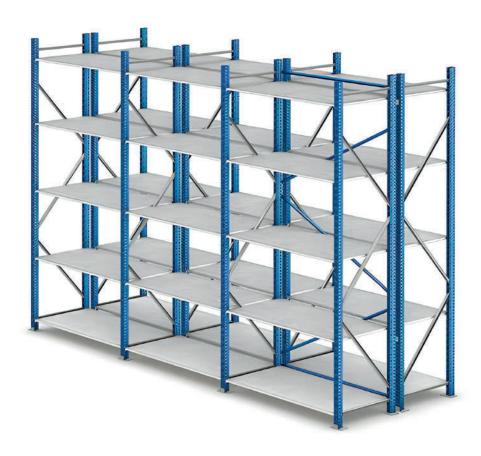
- Ensure maximum utilization of space at height.
- Suitable for order picking and archive storage.
- High accessibility to product.

- May need local authority approval
- Very subjective to building height, floor load.











Longspan Shelving System are designed for medium-duty warehouse applications yet in a not bulky appearance. With profile design & capabilities that proves to be stronger that Boltless Shelving System and almost similar as Pallet Racking System, the system can either be used as Storage Rack or Mezzanine System.



FEATURES:

- The Longspan Shelving is an alternative storage system to Pallet Racking.
- The overall design and set-up is similar to pallet racking but has smaller dimensions and lesser weight load capacity.
- It is suitable for the storage of medium duty goods with weight not more than 1000kgs.
- Suitable for industries/businesses with characteristic which are hand-loaded storage, medium duty storage and storage and display equipment.



ADVANTAGES:

- Save on storage space since it is a multi-tier shelves.
- Flexibility and adjustable height.
- Compatible with other equipment such as wooden walkways, perforated steel and etc.



- Does not allow machine handling when keeping the products.
- Need to be extra careful with the loaded weight or the shelf capacity. As one may misused it as Pallet Racking System.





For light-duty storage, range LESS THAN 400Kgs/Level, boltless shelving system would be the recommended system. Using bolt free connection, this shelving system are easy to install and versatile. It can be easily customize, mix & match as per user's individual requirement.

FEATURES:

- It is for light duty storage ranging less than 400kg/level.
- Preferred storage solution for office, manufacturing, retail and distribution industries.



ADVANTAGES:

- Easy to install since it is a bolt free connection.
- Easy to customize as per customer requirement.
- Access to all sides since there is no sway or cross braces.



- Height and capacity limits are the biggest concern.
- Poor choice for high volume application.
- Cannot use forklift or any other machine since all the products need to be handpicked.



BS5000E Series (Light Duty Series)





Model	KG/Level	Available Sizes:			Packing	Levels	Shelving Type	Colour
		WxLxH(mm)						
B5E	80	Width	Length	Height	Carton Box	4	HDF Board	Grey
				1800				Yellow
		350	900			5	Steel Cap Shelve	White

BS5000M Series (Medium Duty Series)





Model KG/Level	Available Sizes:			Packing	Levels	Shelving Type	Colour		
	WxLxH(mm)								
		Width	Length	Height					
		300	900	1800					l
B5L	120 - 200	450	1200		Loose Form	4	HDF Board	Blue Yellow	l
		600	1500						l
			1800						l

BS5000 Series (Mid High Duty Series)





Model KG/Level	Available Sizes:			Packing	Levels	Shelving Type	Colour	
	WxLxH(mm)							
B5 250-400		Width	Length	Height				
	300	300	900	Loose Form	4	HDF Board	Beige	
	450	450	1200					
	600	600	1500					
		900	1800					
		1200	2400			Steel		
		1500	2700					
			1800	3000			Shelve	
				3600				



A carton flow system is designed to maximize efficiency and accessibility in warehouses. It consists of inclined rollers or rails that allow products to move smoothly via gravity when one product is removed, making it ideal for high-volume and fast-paced environments.

FEATURES:

- Accessible by First In First Out (FIFO) principles.
- Manual handling.
- Inserting goods into the back of the structure and removing them from the front.

ADVANTAGES:

- Minimize stock selection errors by giving each product dedicated lane.
- Excellent storage density.
- Easy access to the product.

- Requires movement and free flow of inventory to function at its best.
- May take longer time to train employees on proper loading and unloading methods.









For storage and retrieval of long items, it is best to use Cantilever Racking System. It is designed to manage loads of varying length and proportion; to be completely accessible from the front without any horizontal restrictions like the conventional pallet racking system.



FEATURES:

- Highly customizable and allows easy access to products regardless of their shape and size.
- It is designed to manage loads of varying length and proportion.
- Easily accessible from the fronts.
- Cost effective option that is ideal for storing item and material that is long, bulky or irregular shape e.g. steel pipes, wooden planks and etc.



ADVANTAGES:

- Easy to install and reconfigure.
- Increase vertical storage capacity.
- Accommodates high capacity requirement.



- Inefficient for storing palletized inventory.
- Requires a lot of floor space.



Structural Steel Platform (SSP) is a mezzanine but it was built via long steel items, e.g. I-Beam, RSC Beam, Hallow Section and etc. Similarly as MTR, based on requirement, there is various type of Floor Decking Type & Accessories could add to the design of SSP.

FEATURES:

- Designed and manufactured based on site requirement, functional requirement and logistic requirement.
- Made with heavy, low gauge steel components that are assembled by bolting them together.
- Suitable for manual picking good for second layer shelves.

ADVANTAGES:

- Storage space utilization with minimal overhead cost.
- Keep the flow plan from undergoing expensive structural changes.
- Customizable to floor loading as high as 1000kgs/m2.



- Less flexible to fit into new area or 2nd area.
- May required local authority approval for installing a structural steel platform.
- Less mobility.





Mezzanine Plus System is MYSTAR latest improvised Structural Steel Platform system that performing the same as a Free-Standing Industrial Platform yet with a built-in Modular System concept. It come with "Hook On & Hook Off" concept which makes it easy to install & uninstall, relocate and reused. It can be easily assembled on-site without the need for welding, cutting, or painting.



FEATURES:

- 1. Column Details The columns come with 100mm pitch that allows flexibility in adjusting the mezzanine height.
- 2. Beams C-Purlin Details Manufactured with pre-selected high tensile materials and it is available in Floor Load Capacity as high as 500ks/m2.
- 3. Flooring Materials Available in 3 flooring materials options for end user to choose from.
 - ▶ Plywood
 - ▶ Interlock Perforated Panel
 - ► Mesh Grating



ADVANTAGES:

- Cost savings and reusable.
- Hassle free during assembled & unassembled process.
- Modular and can be extended or shortened.
- Durable finishing as it finishing is powder-coated.

Upright and Frame Protector Accessories







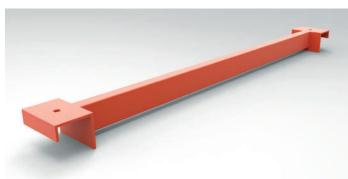


Corner Protector

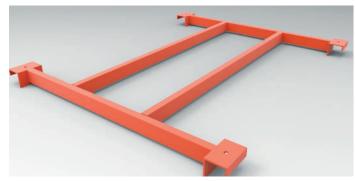
Column Guard

Floor Channel Guide with Bull Nose

Pallet and Shelves Decking Support Accessories







H-Type Pallet Support Bar

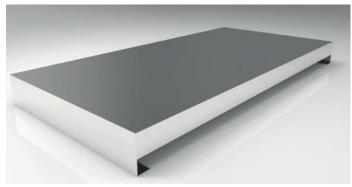


Pallet Back Stopper

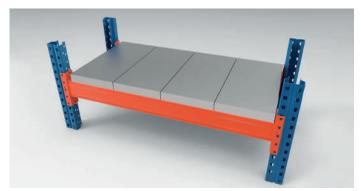


Center Support

(1) Shelf Decking Type



(a) Flush Steel Decking Panel



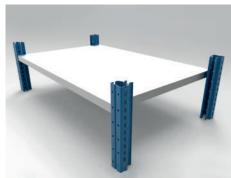
(b) Flush Steel Decking Panel with Beam



(d) Plywood Decking with Plywood Retainer

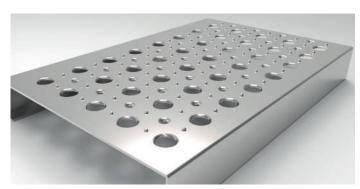


(d) Wire Mesh Decking

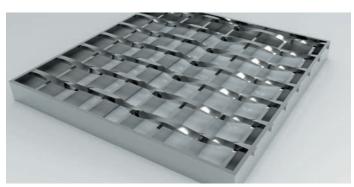


(e) LS500 with Steel Shelve

(2) Floor Decking Type



(a) Interlock Perforated Panel (IPP)



(b) Mesh Grating Type A



(c) Mesh Grating Type B



(d) Chequered Plate

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