



### **HEAVY DUTY RACKING SYSTEMS**



### **Selective Pallet Racking**



Selective Pallet Racking is the simplest & economical racking system which allows 100% accessibility to each pallet. This racking is suitable for large variety of SKU's irrespective of quantity.

### **Benefits**

- Scalable Vertically and Horizontally
- Adaptable to varying pallet / load heights
- Wide range of beam & uprights offer the most optimal solution for any pallet size/load
- Suitable to all applications such as RM stores, FG stores, Distribution Centre etc
- Compatible to most of the Material Handling Equipments (MHE) like Forklift, Stacker,
   Reach Truck
- Variety of Racking Accessories are available to enhance safety during the pallet handling operation of MHEs
- Suitable to offer fast throughput

### Accessories

- Pallet Supports
- Entry Guide Pallet Support
- Fork Entry Bars
- Pallet Stopper
- Upright and Row Guards

### **Double Deep Pallet Racking**

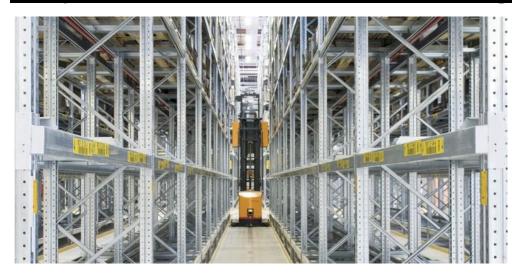


Double Deep Pallet Racking is also simple & economical racking system which allows 50% selectivity. This racking is also suitable for medium or less variety of SKU's irrespective of quantity.

### **BENEFITS**

- Scalable Vertically and Horizontally
- Adaptable to varying pallet / load heights
- Need special Material Handling Equipments with extended reach telescopic / pantograph
- Wide range of beam & uprights offer the most optimal solution for any pallet size/load
- Suitable where SKU variety is not high and ideally 2 pallets of same SKUs are to be kept one behind the other

### Very Narrow Aisle Pallet Racking



VNA stands for "Very Narrow Aisle". There are Material Handling Equipments which needs very narrow aisle, i.e. less than 2 meters. Hence more pallet positions are possible compared to other MHEs.VNAs can reach up to 12 metres high.

VNA Racking is nothing but Selective Pallet Racking but compatible to VNA Equipment. This VNA equipment needs special guides. These guides may be mechanical rails or electrical wires. Mechanical guide rails are widely practiced for ease and economy. However, VNA equipments demand high level of floor accuracy.

### **BENEFITS**

- Scalable Vertically and Horizontally
- Adaptable to varying pallet / load heights
- Need special Material Handling Equipments and guides
- Wide range of beam & uprights offer the most optimal solution for any pallet size/load
- Suitable to all applications such as RM stores, FG stores, Distribution Centre etc.
- Offer fast throughput

### **Drive In Pallet Racking**

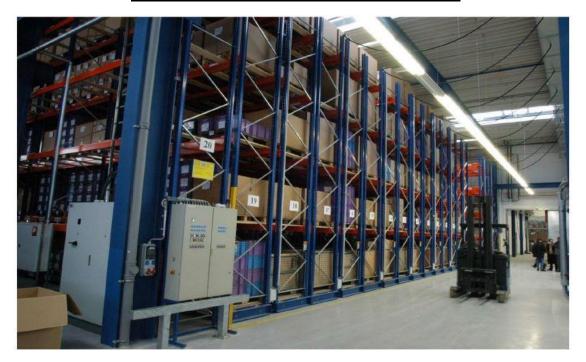


A dense storage system, conceptualized for managing few varieties of SKUs produced or dispatched in batches. As evident from the name, Material Handling Equipment like reach trucks drive inside the racks to access the pallets. Each storage bay is one pallet wide.

### **HIGHLIGHTS**

- Can be configured for LIFO/FIFO dispatch
- Suitable for industries involved in batch production
- Safety & Stability elements to support your operation
- Adaptable to varying pallet / load heights
- Wide range of accessories to enhance safety during operations

### **Mobile Pallet Racking**



# Demonstration studies Example 1: Storage capacity increase in an existing warehouse Existing warehouse with static pallet racking Existing warehouse after installation of powered mobile racking Storage capacity of the warehouse: 672 pallets Storage capacity of the warehouse: 1248 pallets

Racks on wheels, designed for 100% accessibility to each pallet, while ensuring high density of storage. Remote controlled operations, to create aisles instantly at your command. Best of all worlds, at your fingertips!

### **HIGHLIGHTS**

- Suits well for any industry with variety of SKUs
- Electrically driven and PLC controlled
- Compatible with all material handling equipments
- Six levels of safety measures
- Anti black-out feature to manage power failure
- Automatic lighting system to save power
- Upgradeable from current static racks

### Cantilever Racking





Cantilever racking is specially designed to store long items or items of varying length, such as metal beams, pipes, moulding, wooden crates etc.

Depending on the height and weight of the merchandise, either light or heavy duty racking are available.

### **BENEFITS**

- Suitable to store long items
- Handling through special MHEs or Forklifts with special attachment

### Push Back Pallet Racking



Push Back Pallet Racking is another form of dense storage system to utilize maximum 'Storage Cube'. The sequence of pallet loading is done by pushing the first pallet back. Hence, except for first pallet, the loading of pallet is through "MHE Push". However, the sequence of pallet availability for unloading is by gravity. For this purpose, the pallet carts are fitted with rollers. This racking has loading and unloading on the same end. Hence by default, this system operates on LIFO (Last In First Out). This system is designed to store pallets of multiple high and multiple deep. Each level shall be dedicated to one type of SKU only.

### **BENEFITS**

- Suitable where quantity is less while SKU variety is not so
- Suitable to act as buffer storage area
- Adaptable to varying pallet / load heights
- Range of uprights and cart / roller designs to offer the best solution for any pallet size/load
- Compatible to most of the Forklift, Stacker & Reach Truck models
- Variety of Accessories are available to enhance safe pallet movement

### Pallet Flow Racking (Gravity Flow)

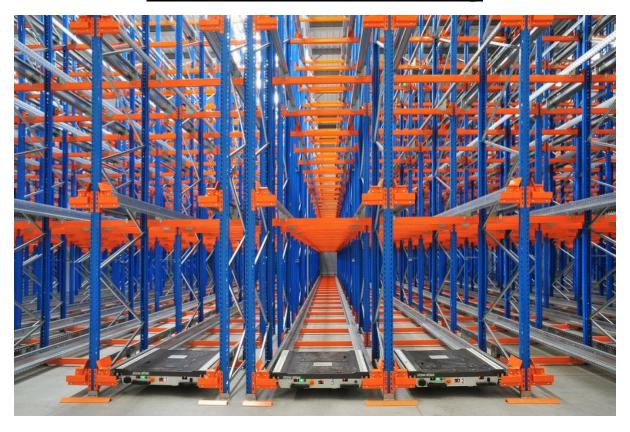


Pallet Flow Racking is another form of dense storage system to utilize maximum 'Storage Cube'. As the name depicts, Pallets flow from one end to another end by gravity force on metal rollers. Hence by default, this system operates on FIFO (First In First Out). This system is designed to store pallets of multiple high and multiple deep. Each level shall be dedicated to one type of SKU only. This racking is suitable for batch production / storing homogeneous products and expiry date for SKU is critical. This racking has pallet loading on one end and unloading on the other end.

### **BENEFITS**

- Suitable to all applications where SKU variety is less or homogeneous
- Suitable for industries involved in batch production
- Suitable to act as buffer storage area
- Adaptable to varying pallet / load heights
- Range of uprights and roller designs to offer the best solution for any pallet size/load
- Compatible to most of the Forklift, Stacker & Reach Truck models
- Variety of Accessories are available to enhance safe pallet movement on rollers
- High Throughput and equipment handling is minimal

### **Shuttle Pallet Racking**



Shuttle on racks, designed to swiftly carry pallets to the forklifts. Remote controlled operations to move shuttles within the racks. Configurable in LIFO/FIFO, this solution ensure fast throughput while improving storage density.

### **Highlights**

- Suits industries with limited variety of SKUs
- Ideal for buffer storage to manage seasonal demands
- Interactive radio transmitter to move goods
- Operation by remote control
- Driven by rechargeable battery
- Compatible with all material handling equipments
- Highly safe, as forklifts stay away from the racks
- Operate in sub zero temperatures upto -30 degrees.
- Custom setup to enhance efficiency and speed
- Upgradeable from current static racks



QUICK RESPONSE, QUICK SOLUTION, QUICK EXECUTION

### **SELECTIVE PALLET RACKING**



### **Our Comprehensive Solution Offering - Range**



### **ABOUT SELECTIVE PALLET RACKING**

- A pallet storage system with 100% selectivity
- Suitable for bulk-picking / unitized loads
- Operated by material handling equipments like forklift, reach truck, stacker

- referred as Adjustable Pallet Racking (APR) in SEMA/FEM/EN codes

### One of this could be your SKU (RM & FG)







Bags



Drums



**Packing Materials** 



Beverages



Bins



Tyres



Can

### Let us convert it to a Pallet









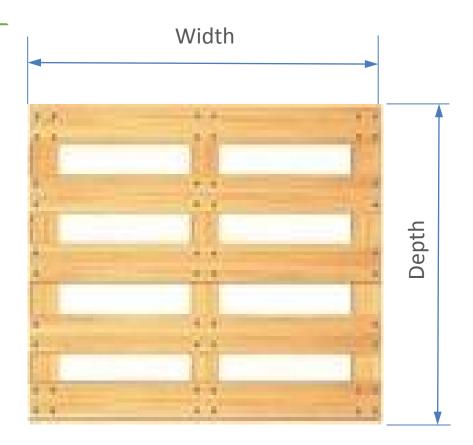








### Let us decide the suitable pallet size for you



Pallet Width	Pallet Depth
1200	1200
1200	1100
1200	1000
1200	900
1000	1200
1000	1100
1000	1000
1000	900
800	1200
800	1100
800	1000
800	900

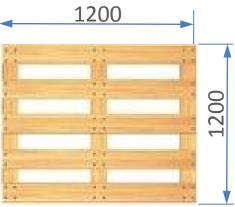


### Let us configure the Racks

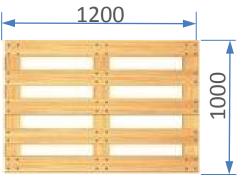
### Our Rack range for 1200mm wide Pallet



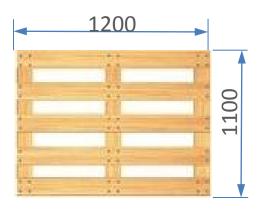
Two Pallet Per Level



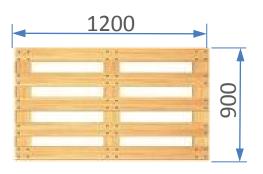
Rack Width: 2700 Rack Depth: 1000



Rack Width: 2700 Rack Depth: 800



Rack Width: 2700 Rack Depth: 1000

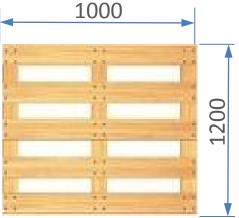


Rack Width: 2700 Rack Depth: 800

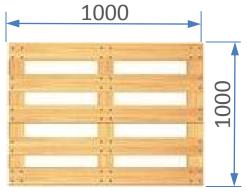
### Our Rack range for 1000mm wide Pallet



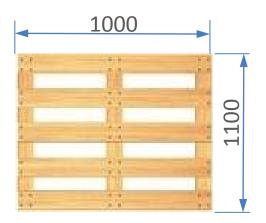
Two Pallet Per Level



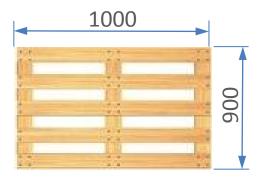
Rack Width: 2300 Rack Depth: 1000



Rack Width: 2300 Rack Depth: 800



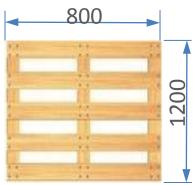
Rack Width: 2300 Rack Depth: 1000



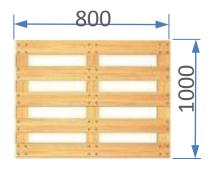
Rack Width: 2300 Rack Depth: 800

### Our Rack range for 800mm wide Pallet

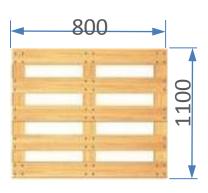




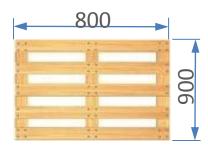
Rack Width: 2700 Rack Depth: 1000



Rack Width: 2700 Rack Depth: 800



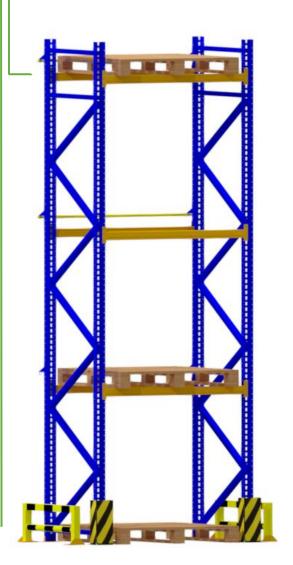
Rack Width: 2700 Rack Depth: 1000



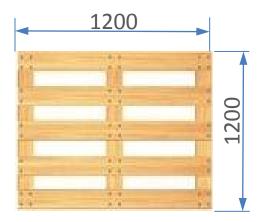
Rack Width: 2700 Rack Depth: 800

Three Pallet Per Level

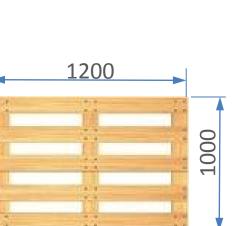
### Our configuration to keep single pallet / level (Half Unit)



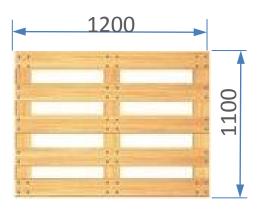
One Pallet Per Level



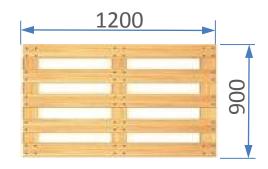
Rack Width: 1400 Rack Depth: 1000



Rack Width: 1400 Rack Depth: 800



Rack Width: 1400 Rack Depth: 1000

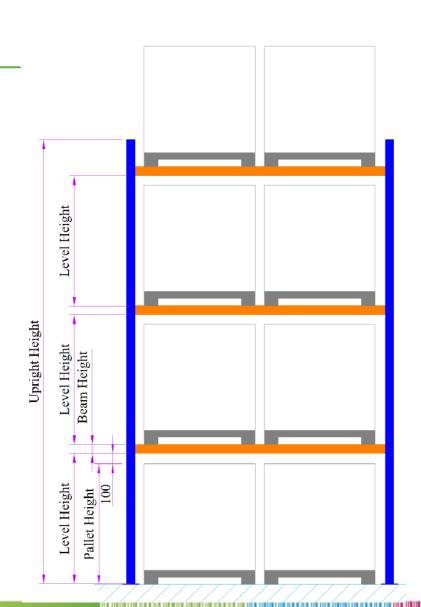


Rack Width: 1400 Rack Depth: 800

## System Height



### Let us Configure the Rack Height



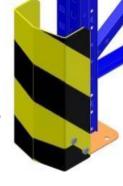
System Type

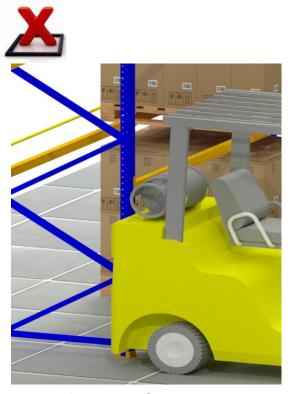
Pallet Height	G+2	G+3	G+4
1000	2700	3900	5100
1100	2900	4200	5500
1200	3100	4500	5900
1300	3300	4800	
1400	3500	5100	
1500	3700	5400	_

We care for your safety

### **Column Guard**

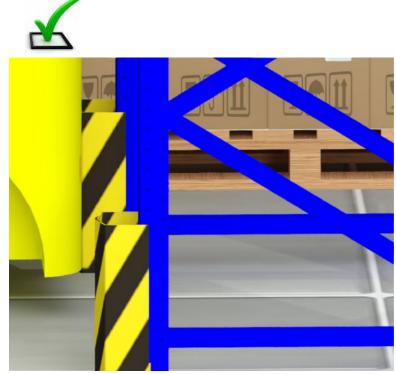
### ENSURES SAFE MHE OPERATION IN PICKING/OPERATING AISLE





Without Safety accessories

MHE hitting the Rack



With Safety accessories
Column Guard prevents MHE from Hitting

### **Row Guard**

### ENSURES SAFE MHE OPERATION ACROSS AISLE MOVEMENT





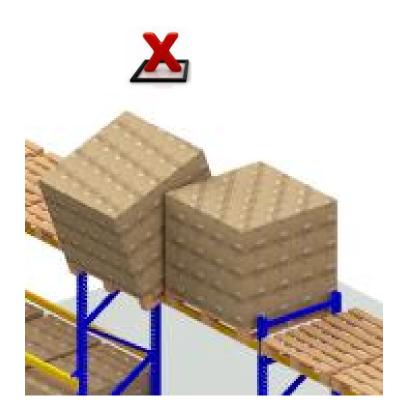


With Safety accessories
Row Guard prevents MHE from Hitting

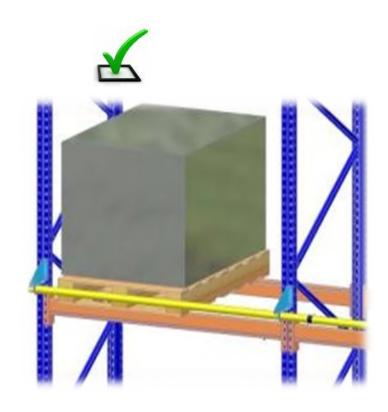


### **Pallet Stopper**

### ENABLES MHE OPERATOR IN ESTIMATING RACK DEPTH THUS PREVENTING PALLET FALL



Without Safety accessories
Pallet falling from rear side of rack



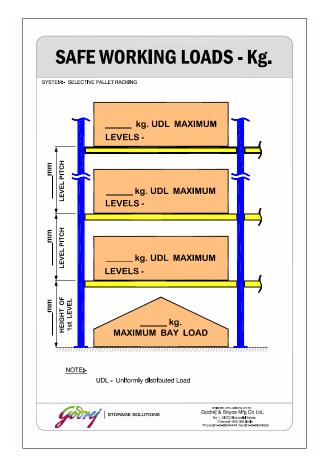
With Safety accessories
Pallet stopper stop falling of pallet



### **Safety Signage**

### ENSURE SAFE & CORRECT WAREHOUSING PRACTICES





# **Final Layout**

### References









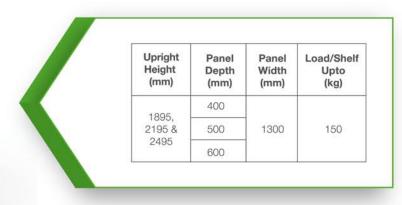




### QUICK RESPONSE. QUICK SOLUTION. QUICK EXECUTION

### **BOLTLESS SHELVING**

Contemporary bolt free modular shelving system for multiple light load applications



\*\*Cladded and non-cladded options are available

### **MOBISTACK NEO**

Modern compact mobile shelving system for space optimization

System Height (mm)	System config (mm)	System Depth (mm)	Load/Shelf Upto (kg)
2100 &	LD2, LD3,	300	90 kg (300 deep)
2400	LD2A	400	80 kg (400 deep)



### **LONGSPAN SHELVING**

A versatile shelving system for storing long & odd size items.

Upright Height (mm)	Frame Depth (mm)	Beam Span (mm)	Load/Level Upto (kg)
2200,		1800	540
2500, 2800 &	600 & 900	2200	540
3200		2600	455





Upright Height (mm)	Frame Depth (mm)	Beam Span (mm)	Load/Leve Upto (kg)
2200		2300	2000
3300, 4400, 5400 &	800 & 1000	2700	3000
6500		1400	1000

SELECTIVE PALLET RACKING

High rise racking system for storing

palletized loads.

\*\* Additional accessories

Row guard | Column guard | Pallet stoppers

### **HEAVY DUTY SHELVING**

Adaptable shelving system for heavy load applications.



Upright Height (mm)	Frame Depth (mm)	Beam Span (mm)	Load/Leve Upto (kg)
		2300	1000
2200 & 2800	800 & 1000	2700	1000
		1400	500

### **MULTIFLEX SHELVING**

Conventional slotted angle flexible shelving system.

System Height (mm)	Panel Width (mm)	Panel Depth (mm)	Load/Shelf Upto (kg)
1829 (6ft), 2134 (7ft) & 905 2438 (8ft)		371	100kg (371)
	905	448	140kg (448)
		600	125kg (600)

\*\*Cladded and non-cladded options are available









