

# Palletstor Racking

SPACE EFFICIENT PALLET STORAGE

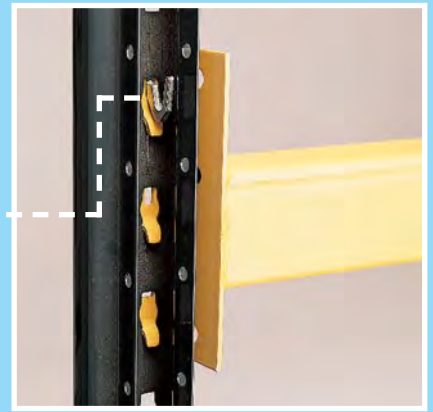




Beams can be removed and repositioned\* when changes in the use of the racking occur. Although Palletstor is adjustable, once the beams are slotted into position in the frame uprights, an inter-locking structure of great strength and rigidity is maintained.

Each beam requires a pair of steel Safety Locking Pins. When located they ensure the beam is correctly positioned and help prevent the beam being dislodged during use.

\*Always check design parameters with supplier before adjusting beam positions.



The Palletstor racking system, one of the most widely used pallet racking systems available today, has evolved as a result of our in depth knowledge of storage and materials handling techniques gained during 35 years experience as a leading manufacturer.

## **Pallet Racking** solutions for your business

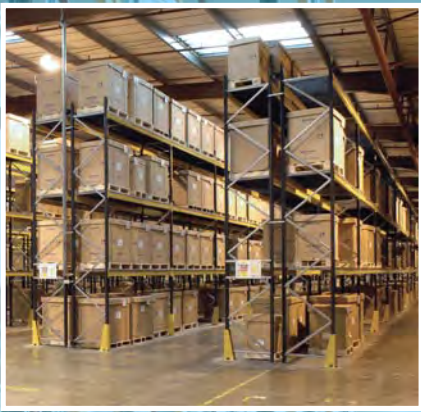
**Easily installed, cost-effective and versatile. Adjustable beam racking is the most widely used of pallet storage systems and allows direct access to each pallet stored.**

By selecting from a wide range of sizes and duties for standard frame uprights and beams, Palletstor racking can be configured to meet precise criteria in terms of load volume and weight, accessibility, handling requirements and space utilisation.

Palletstor pallet racking in its standard form provides safe, cost-effective storage for many different kinds of goods and materials. But for increased versatility Palletstor also offers a range of practical add-on accessories (shown on pages 14-15) to make the storage and handling of goods even easier.



*Adjustable pallet racking can incorporate space-efficient 'tunnel' or 'bridging bays' positioned to improve access for lift trucks throughout the warehouse.*

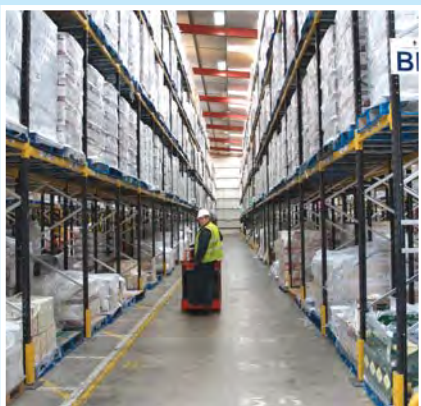




## Wide Aisle standard racking

Easily installed, cost-effective and versatile, wide aisle racking is the most widely used of pallet storage systems and allows direct access to each pallet stored.

With adjustable beams, racking can be re-configured to accommodate changes in the type of goods stored and wide aisles allow access by all types of truck, making specialised handling equipment unnecessary.





## Narrow Aisle solutions

By allowing fork lift trucks to operate in aisles up to half the width required in conventional adjustable beam pallet racking, **Narrow Aisle Palletstor** makes excellent use of floor space and maximises the height at which goods can be stacked.

Using specialised lift trucks in either 'man-down' or 'man-up' variants, narrow aisle racking is precision designed for safe, efficient load handling within the tight confines of these space-efficient aisles.

Guidance rails or wires fitted at floor level ensure precise positioning of trucks. This has the multiple benefit of improving safety, whilst minimising the incidence of accidental damage to racking as well as improving the speed and accuracy of load handling.



*Pick and Deposit (P&D) stations can be fitted at the ends of aisles, allowing controlled, efficient and safe load handling into and out of narrow aisle structures.*





## Double Deep racking systems

A variant on standard adjustable beam racking, Double-deep Palletstor, as the name implies, allows pallets to be stored two deep but still accessible from the same aisle.

By reducing the number of access aisles and using the space saved to accommodate additional racking, a Double-deep configuration provides a highly space-efficient storage system.

This first-in, last-out system, used with an efficient stock management system can offer the advantage of the increased storage density.





## Drive In racking systems

Palletstor drive-in racking provides a highly space-efficient solution to the storage and throughput of palletised goods.

By dispensing with access aisles drive-in racking provides a high-density of storage in a given area to increase capacity by some 60-80% over conventional 'aisle' racking.

Pallets are stored on guide rails in the depth of the racking and forklift trucks enter these 'storage lanes' to deposit or retrieve loads.

Access can be from one end (the true 'drive-in' configuration) or from both ends ('drive-through', for improved stock rotation).

Racking heights up to 11 metres allow the full height and floor area of the building to be used to provide maximum cubic storage space.

Drive-in racking - the ideal solution for optimum space utilisation without requiring specialist handling equipment.



# Carton Flow Racking

Carton live storage or 'flow racking' operates on the same principle as pallet live storage, but is used for stock which needs to be hand-loaded and picked.

Live storage systems reduce order picking times and help minimise errors, as not only are items presented precisely at the picking face, but effective management of the throughput and stock levels of goods can also be easily maintained, protected, silver-based.



*The angle of incline of the roller trays, the size and number of rollers within the trays, and the load capacity of the support frames, are tailored to the size and weight of the items stored.*



# Push Back Racking

Effectively utilising floor and cubic space, dynamic Push-back racking is amongst the most space and time-efficient pallet storage systems available.

Pallets are loaded in sequence onto wheeled carts or rollers and are pushed back along inclined beds.

Pallets can be stored up to 4 deep on carts or 10 deep on rollers and when a load is retrieved the remaining pallets move forward into position at the picking face.

Pallets are retrieved on a 'first-in, last-out' basis and with each product having a dedicated lane, Dynamic Push-back racking is particularly useful in marshalling areas, and for long-term bulk storage and handling.



*Low profile design allows for extra lift/clearance. Carts interlock to prevent jamming and to control pallet descent. Accommodates up to 6 pallets deep.*







## Pallet Live Racking

Working on a first-in, first-out basis, dynamic Live Palletstor provides extremely high levels of storage density in a given area.

Pallets are loaded onto dedicated lanes of inclined gravity rollers which are set at a fixed gradient. When a load is taken from the picking face, the next pallet rolls into position, with replenishment stock loaded at the opposite (upper) end of the lane.

Stock rotation is therefore automatic with the minimum of fork lift truck movements required to handle the flow of goods.

*With pallet separators and brakes fitted, each load is segregated within the lane, preventing pressure accumulation or crushing.*





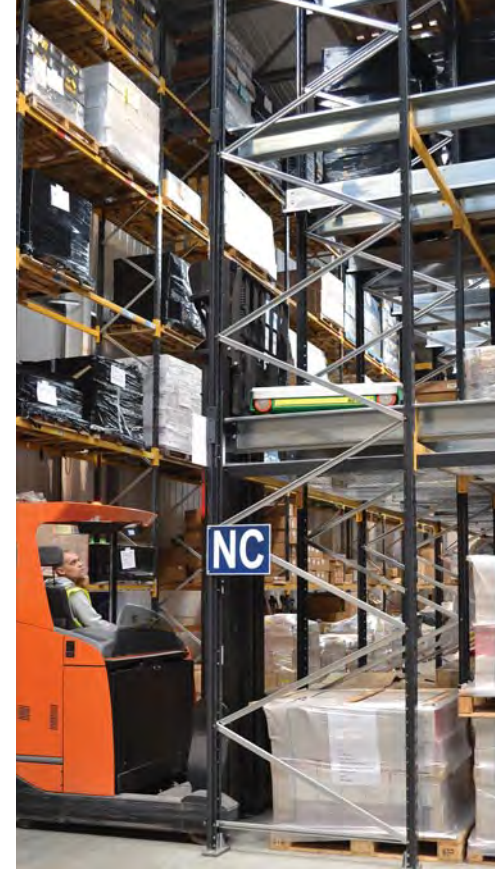
# Pallet Shuttle system

Shuttle storage is an alternative to Drive-In, Push Back or Pallet Live racking systems. These systems, though efficient, are limited by the length of the storage lane that can be practically achieved.

The shuttle storage solution overcomes this by storing pallets within a system that can operate to greater depths. The racking features guide/support rails which run the depth of the rack structure on which an automated shuttle travels.

The shuttle is easily moved between lanes by a standard fork lift truck. Pallets are loaded onto a shuttle at the front of the lane, which transports the pallet down to the other end. The in-built sensors on the shuttle detect the position of previous pallets and places the new load at a predetermined distance from them, before returning to the start face.

The shuttle movements are sent via the radio remote controller allowing the forklift truck and driver to be released to other tasks while the shuttle operates.



# Specialised storage

Whilst providing the ideal means of storing palletised loads, the versatility of the Palletstor system means large, bulky or simply awkward to store items can be accommodated using the most accessible and space-efficient methods.

Combinations of standard components and accessories with specialised 'bespoke' items create successful solutions to what may initially appear to be the most difficult of storage problems.

Raised platforms and 'tiered' systems also provide a cost-effective means of utilising the height of a building thereby maximising the storage capacity for a given floor area.



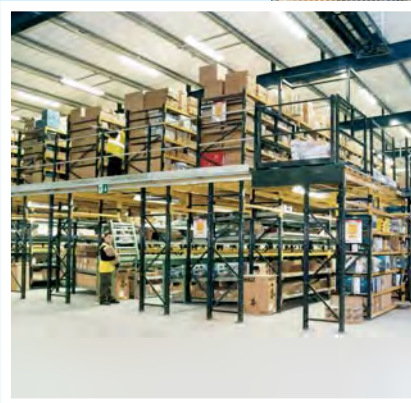
# Storage platforms

**Create more storage space without increasing floor space - by building upwards!**

Raised platforms and 'tiered' shelving systems provide a cost-effective means of utilising the height of a building for storage, thereby potentially doubling the capacity of a given floor area.

With integral walkways, stairs, safety rails and any number of shelf positions, these raised structures can be used as finished goods or component stores and also for order picking, where powered or gravity conveyors can be incorporated to move the selected goods swiftly through and on to despatch.

The strength, structural integrity and versatility of these structures is provided by Palletstor and Longspan heavy duty shelving ranges which can also be used to create versatile wide-bay open shelving or binning systems in conventional floor-level configurations.



*For staff safety and to minimise fire risk, overhead walkways can be constructed from perforated steel planks or steel mesh, for increased light penetration, improved ventilation and efficient sprinkler operation.*

# Barrier Rails for racking and equipment

**Palletstor Barrier Rails have been developed to allow organisations throughout industry to protect equipment and facilities which are vulnerable to accidental fork truck damage.**



As well as protecting racking and shelving in busy warehouse or factory environments, Barrier Rails segregate and protect fork lift truck battery chargers, vending machines, conveyors, factory or warehouse offices. They also serve as safety barriers in loading bays and to demarcate doorways and pedestrian areas. Barrier Rails help companies comply with the requirements of current Health & Safety regulations - to make the working environment safer.

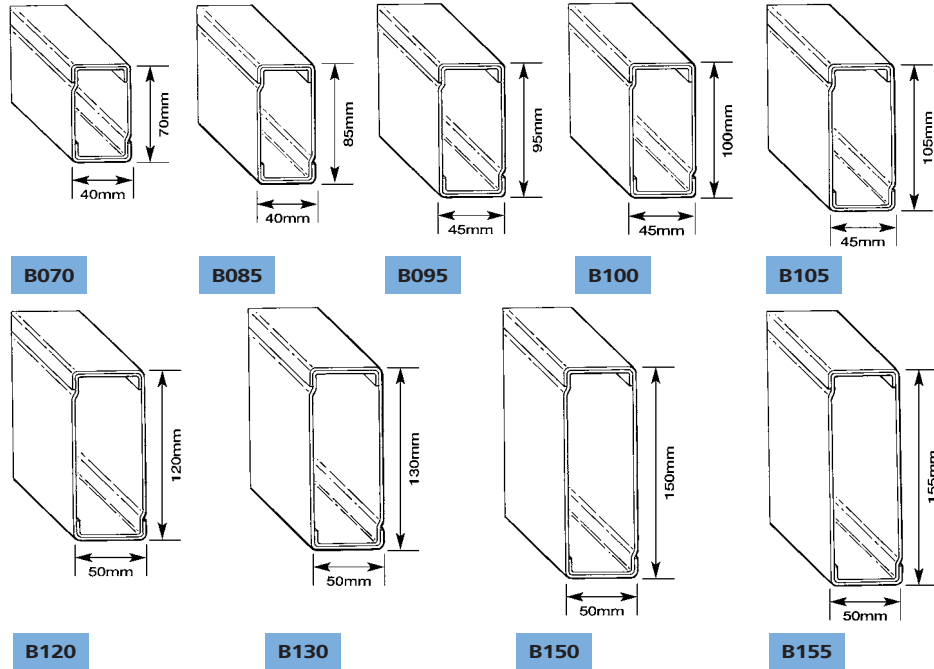


# Specification

## Box Beams

Manufactured from a pair of interlocking 'C' sections, for strength and efficient material utilisation.

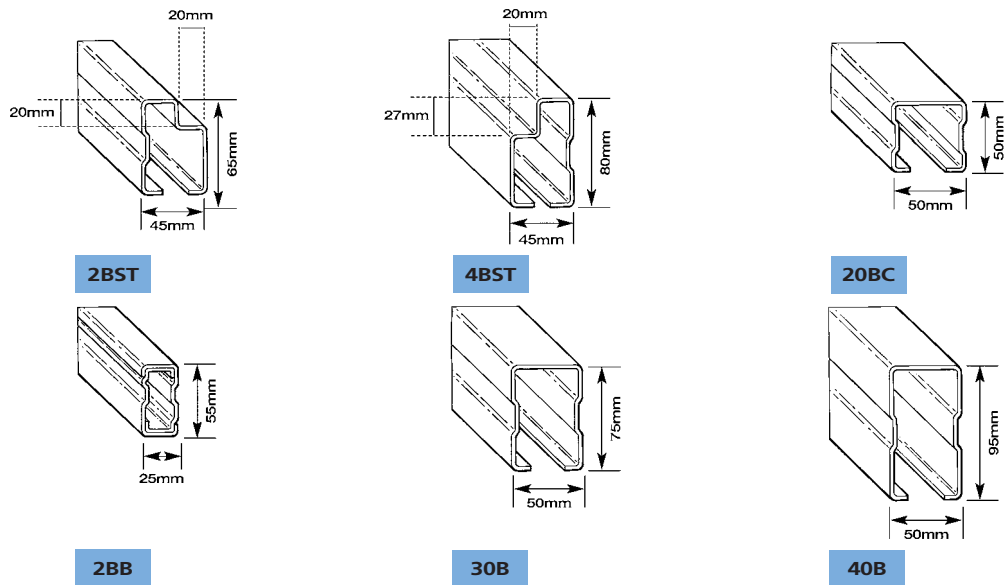
The Palletstor system includes a range of eight pallet support beams, with steel sections of varying thickness. This allows the design of racking systems which cater safely and cost-effectively for the widest range of load requirements.



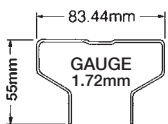
## Shelving & Open Beams

Manufactured from formed steel sections, 'stepped' shelving beams (2BST & 4BST) are used to support steel shelf panels, chipboard or other shelving material.

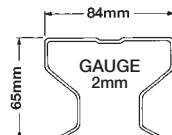
2BB, 20BC, 30B & 40B beams provide a wider range of loading capabilities for shelf support.



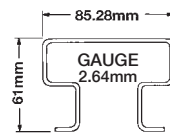
## Upright Sections



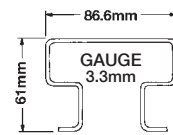
Medium Duty



Heavy Duty



Extra Heavy Duty



Super Heavy Duty

## Standard Component Colours

### Frame Uprights



HIGH VISIBILITY YELLOW  
House Colour

### Beams & Accessories



GRAPHITE GREY  
BS 5252 18 A14

### Finish

Palletstor racking components are phosphate pre-treated, then powder coated (some items wet painted) and stove enamelled to give a glossy, durable high-quality paint finish. Bracing is galvanised. Customer's 'house' colours and galvanised finish available on request.

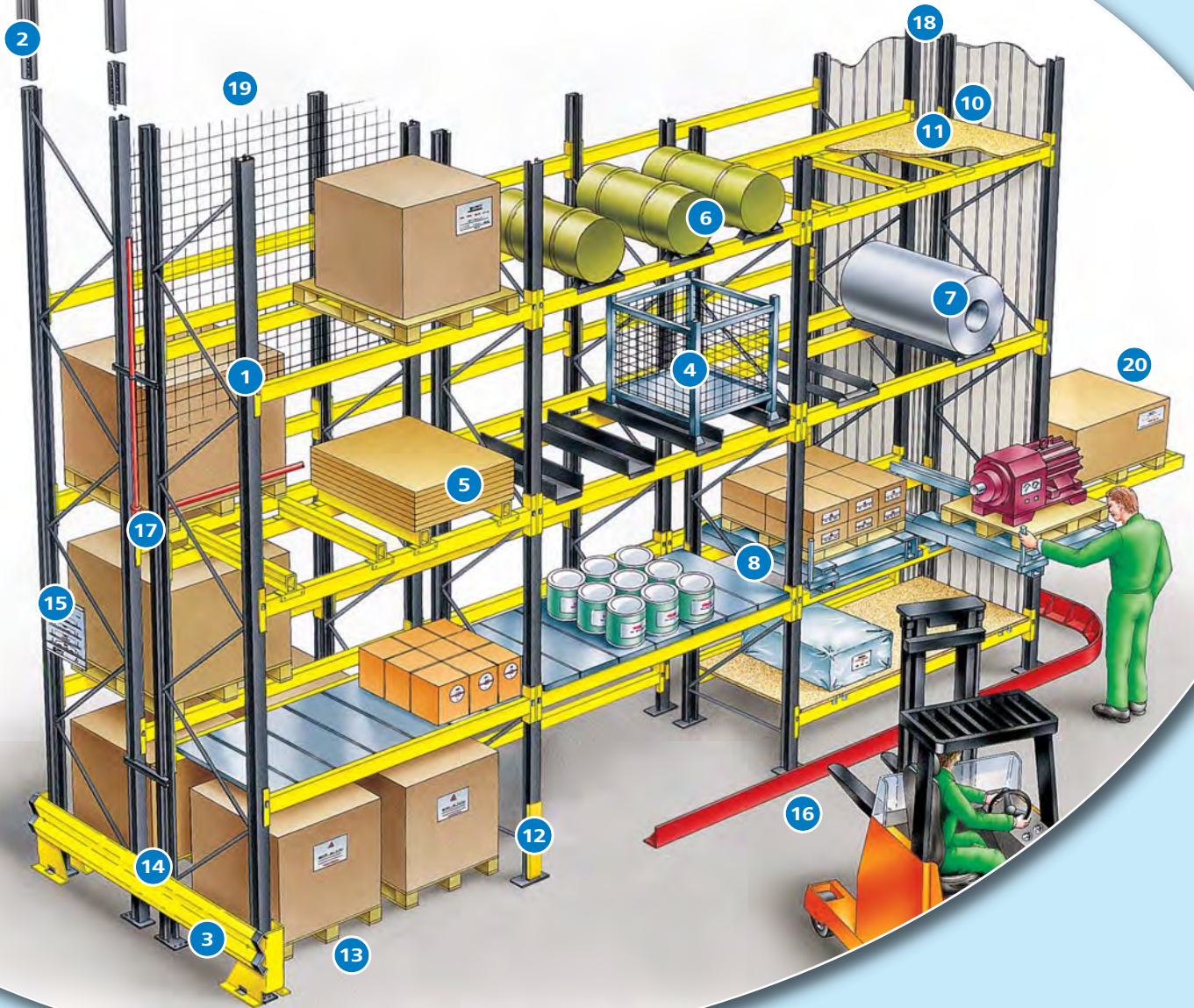
### Material

Palletstor components are made from high quality steel. Every stage in the manufacturing process is subject to stringent quality procedures, developed through years of experience.

Swatches shown give an approximate colour guide only.

Standard colour for beams and some accessories is High Visibility Yellow.

Standard colour for frames and some accessories is Graphite Grey. Bracing is galvanised.



# Racking Accessories

By utilising the full range of accessories you can improve your warehouse operation and, as we are the original manufacturer, you can be sure they are right for the job.



**1 Run Spacer**

Used to maintain a fixed parallel safety clearance between double sided runs of racking.



**2 Bolted Jointing Unit**

Connects frames vertically, and ensures strength is fully maintained at the joints. Allows beams to be located upto the joint.



**3 Frame Footplates**

Essential for stability, allow racking to be bolted to the floor. Four duties available, to complement specific requirements.



**4 Pallet Foot Support**

Used in pairs across the beams, to support post pallets/stillages or caged pallets which have corner posts, skids or feet.



**5 Fork Spacer**

Used in pairs across beams, to provide fork entry spaces. Provides support for and access to non-palletised loads.



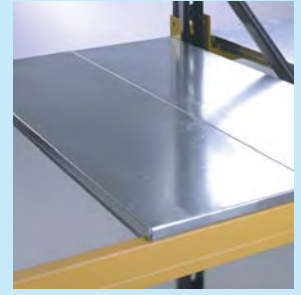
**6 Drum Chock**

Locates on the front and rear beams, and cradles the ends of a drum or barrel. Prevents lateral rolling of drums or cylindrical items. Used in pairs.



**7 Coil Cradle**

Spans beams to provide location and support for coiled materials - metal strip, for example - or other cylindrical items.



**8 Steel Shelf Panels**

Panels span a pair of box beams to provide wide-bay steel shelving. Made from pre-galvanised steel.



**9 Steel Shelf Panels**

Panels span and sit within a pair of stepped beams providing minimising the shelf thickness. Made from pre-galvanised steel.



**10 Shelf Support**

Fitted to stepped beams, to provide additional support and greater loading capacity for chipboard shelving.



**11 Shelf Support**

Fitted to box beams, provides support and greater load capacity for shelving. Cladding location bracket also shown.



**12 Column Protector**

Minimises the potential damage of forklift truck impact to racking upright. Steel construction with foam rubber insert.



**13 Upright Protectors**

Protect the lower section of XL uprights against fork truck collision damage. Available in 'U'-shaped or right-angled configuration.



**14 Rack End Protector**

Provides protection to the ends of racking. Available also as a barrier rail (with support posts) to protect equipment and walkways.



**15 Racking Signs**

Clearly display caution and loading/safety information relating to racking usage, and conform with SEMA guidelines.



**16 Guide Rails**

Allow safe and accurate guidance for trucks operating within racking, particularly in drive-in or narrow aisle applications.



**17 Sprinkler Systems**

Can be supported within the racking structure.



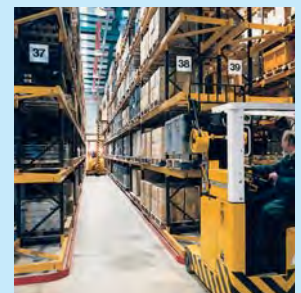
**18 Frame Cladding**

Available to suit specific applications.



**19 Safety Mesh Screens**

Fitted for safety, and the security of palletised loads. Often fitted where a walkway or working area is adjacent to racking.



**20 P&D Stations**

Pick and Deposit (P&D) stations are used at the end of racks to assist in load handling between narrow aisle and other trucks.



**Pallet** racking



**Two-tier** shelving



**Lockers** & Cupboards



**Mobile** shelving



**Mezzanine** floors



**Industrial** shelving



**Stockroom** shelving



**Small parts** storage



**Square** tube



Wensum Works, 150 Northumberland Street, Norwich, Norfolk, NR2 4EE  
Phone: +44 (0)1603 629956, Fax: +44 (0)1603 630113  
Email: sales@eseprojects.co.uk Web: www.eseprojects.co.uk

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