

AVANTA



CASE STUDY

Barbour

Multi-Level Picking
Structure for
Iconic Heritage Brand



Multi-Level Picking Structure for Iconic Heritage Brand

Avanta UK Ltd, the Leeds-based storage equipment specialist has secured and delivered a large-scale turnkey warehouse pick and store facility for the Meldrum Group on behalf of J. Barbour & Sons Ltd.



Meldrum Construction Services Group – Principal Contractor

The Meldrum Group is an innovative Northeast based company offering a fully integrated service; from planning and designing, to the civil engineering and construction of the project. This coupled with the Facilities Management services means Meldrum can take care of a finished building with a planned and reactive maintenance support service, giving clients complete peace of mind throughout the lifecycle of their assets and building.

J. Barbour & Sons Ltd. – End User Client

J. Barbour & Sons Ltd is an English luxury and lifestyle brand founded by John Barbour in 1894 that designs, manufactures and markets waxed cotton outerwear, ready-to-wear, footwear and accessories under the Barbour and Barbour International brands.

The company has been based in South Shields since founded and occupies numerous buildings, offices, warehouses, and factory shops within a relatively small footprint on the same industrial estate creating and sustaining local employment opportunities.

Brand Drives the Growth

The growth in popularity around the world for the Barbour brand and the opportunities of multi-channel routes to service all markets fuelled the requirement for greater storage capacity.

The new warehouse extension would not only increase storage capacity but also improve operations on site with the faster movement of clothing in and out of the estate. Once the project is complete there will be the creation of 20 additional full-time jobs.

Meldrum Group successfully tendered for the build of a 5,500 square metre warehouse extension offering full M&E fit out and CDM of the site. Creating a superb, fully equipped, and ready to use warehouse facility for the end user client. From the groundworks to the civils, to the electrics – Meldrum provided the full solution.

As work commenced on the build by Meldrum, Avanta UK worked closely with Barbour on the theme of maximising the storage space of the new warehouse – The available floor space and more importantly – The cube “top to bottom, left to right & front to back”.

Circa 15,000 square metres of storage

4700 levels of picking

3 Tier Storage and Picking Structure

2x 3 Tier Mezzanine Floors – Fire Rated

2x Pedestrian / Goods lifts

Multi-Level Picking Structure for Iconic Heritage Brand

The Storage Solution

To store multiple size boxes with personnel access to each box – A multi-tiered Rack supported structure with walkways and mezzanine floors was the proposed solution. This gave Barbour:

- 78M x 58M – Ground plus 3x Walkway Levels
- Finished Floor Levels – 2770, 5,490 & 8,210mm
- Circa 15,000 square metres of storage
- 4700 levels of picking, the equivalent of:
- 84,000 (circa) BDCM1 Retail Boxes if boxes employed were uniform

Selected Details

3 Tier Storage and Picking Structure constructed from Heavy Duty Pallet Racking with Mesh Decks, incorporating.

Mezzanine Floors

2x 3 Tier Mezzanine Floors – Fire Rated
1x Single Level Mezzanine Floor – Fire Rated

Mezzanine floors within the structure created marshalling areas and space for pick and pack operations.

Pallet Racking

10 to 11M high heavy-duty pallet racking with timber decked walkways supported by

secondary support steels. Each shelf level incorporated a chrome wire mesh deck shelf support.

Access Throughout the Structure

Person access to each level was achieved by constructing 4x fire enclosed staircases with access to each floor level of the structure at multiple points.

2x Pedestrian / Goods lifts

Goods can be transported around the structure via 2x conveyor systems and 4x spiral chutes.

Pallets can be deposited on to floor levels via the 4x pallet gates supplied.

Safety Considerations Included

Smoke Baffle – Avanta designed, supplied, and installed a non-load bearing plywood cover roof supported via 47x47mm Unistrut construction. This was to the top of level 2 to reduce the sprinkler requirement at roof level and satisfy Part B escape regulations.

Fire Enclosed Staircases – For safe pedestrian access to all levels of the structure.

Handrail – Fitted to exposed edges of the structure.

Anti-collapse Mesh – to arrest the fall of boxes to exposed edges.

Netting – Also installed in certain edge areas.

Timescales

Working closely with the Principal Contractor

– Meldrum Group, a critical path for the main phase of works was agreed. This was to ensure zones, aisles of the main structure were to be handed over for the mechanical & electrical teams to follow.

The final phase was to fit the mesh decks to each location once all services were in place. Avanta provided site supervision throughout the duration of the project of multiple trade teams.

Comments

Avanta – “It has been a pleasure to work with the team at Meldrum Group on behalf of Barbour. The Meldrum team are very professional, organised, and efficient at delivering projects of this scale. To create this multi-level structure for a brand with such rich heritage has been extremely pleasing”.

Further Product Information

What is a Pick Tower / Multi-tier Shelving?

These systems are a cost-effective alternative to mezzanine floors or extending the warehouse facility or relocation.

Multi-tier shelving floor (Also known as a picking tower) is a free-standing structure, that it is designed to provide storage to all levels of the structure, within the same footprint. This storage system is also known as a rack supported structure and they are used to improve picking efficiency and maximising storage capacity. This is achieved by utilising the available height in the warehouse.

The structure utilises double or multiple

height shelving (Can be shortspan or Longspan) or pallet racking with steel angels to support the flooring materials (Could be chipboard, steel etc) to create walkways and steel staircases to provide access to all products. A self-supporting structure with 100% accessibility.

Benefits of a Multi-tier Shelving

The system is cost effective as it reduces the requirement for large structural steels as the strength is from the shelving / racking structure. Also, you can maximise the storage height and headroom within the structure as there is not the requirement for large beam supports – a thin line structure.

Avanta UK Ltd

Our specialities include mezzanine floors, storage systems (including warehouse shelving, pallet racking, longspan shelving and mobile shelving systems) and interior solutions (including office partitions, office storage, steel partitions, mesh security cages, workbenches and warehouse flooring solutions).

We cover the whole of the UK and work closely with the major manufacturers offering warranty, peace of mind and on-going support.

We cover the whole of the UK and work closely with the major manufacturers offering warranty, peace of mind and on-going support.



















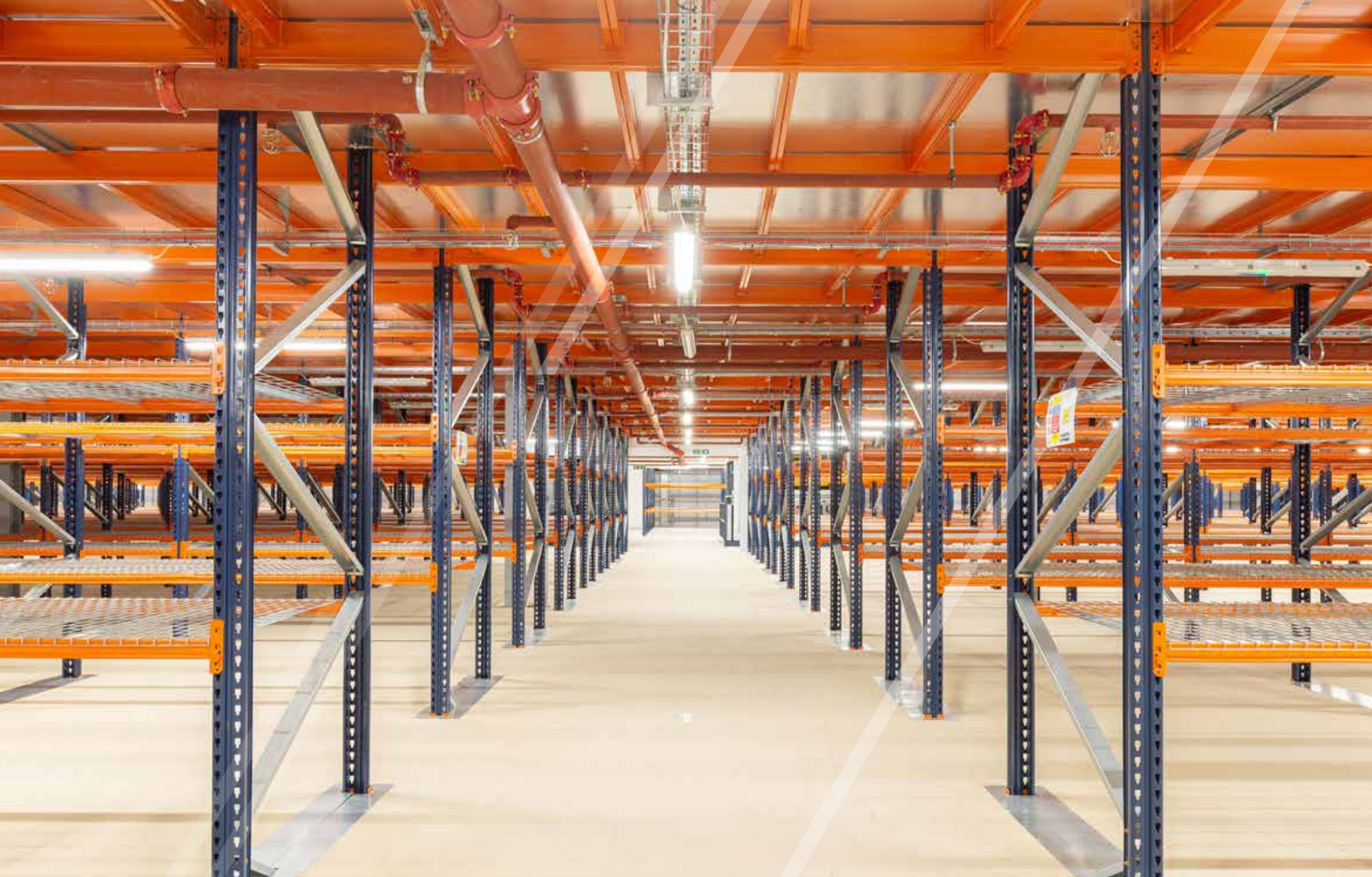




Avanta UK Ltd – Unit 1, Matrix Court, Middleton Grove
Leeds, West Yorkshire, United Kingdom, LS11 5WB

AVANTA





Avanta UK Ltd – Unit 1, Matrix Court, Middleton Grove
Leeds, West Yorkshire, United Kingdom, LS11 5WB

AVANTA

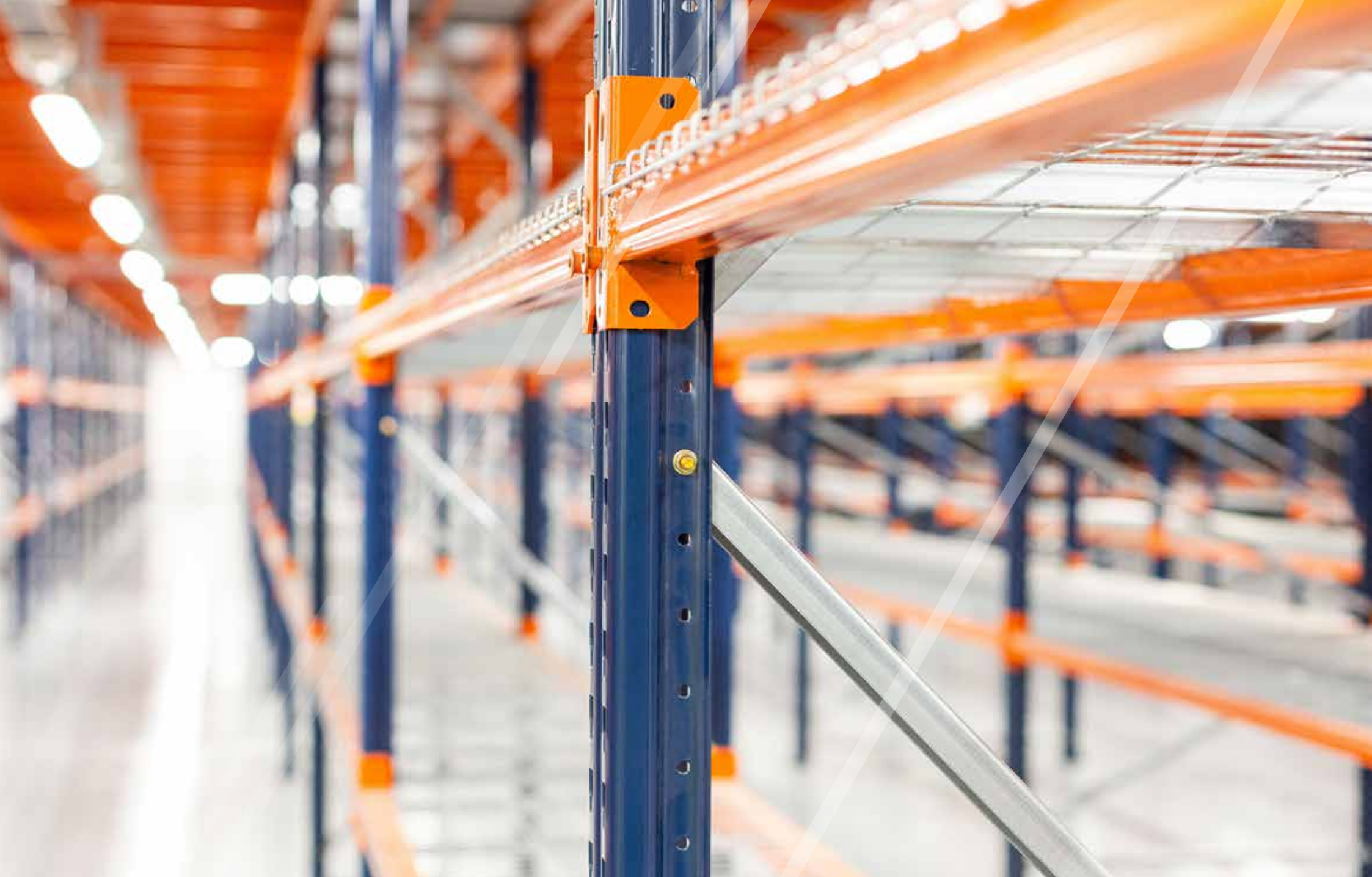




Avanta UK Ltd – Unit 1, Matrix Court, Middleton Grove
Leeds, West Yorkshire, United Kingdom, LS11 5WB

AVANTA





Avanta UK Ltd – Unit 1, Matrix Court, Middleton Grove
Leeds, West Yorkshire, United Kingdom, LS11 5WB

AVANTA









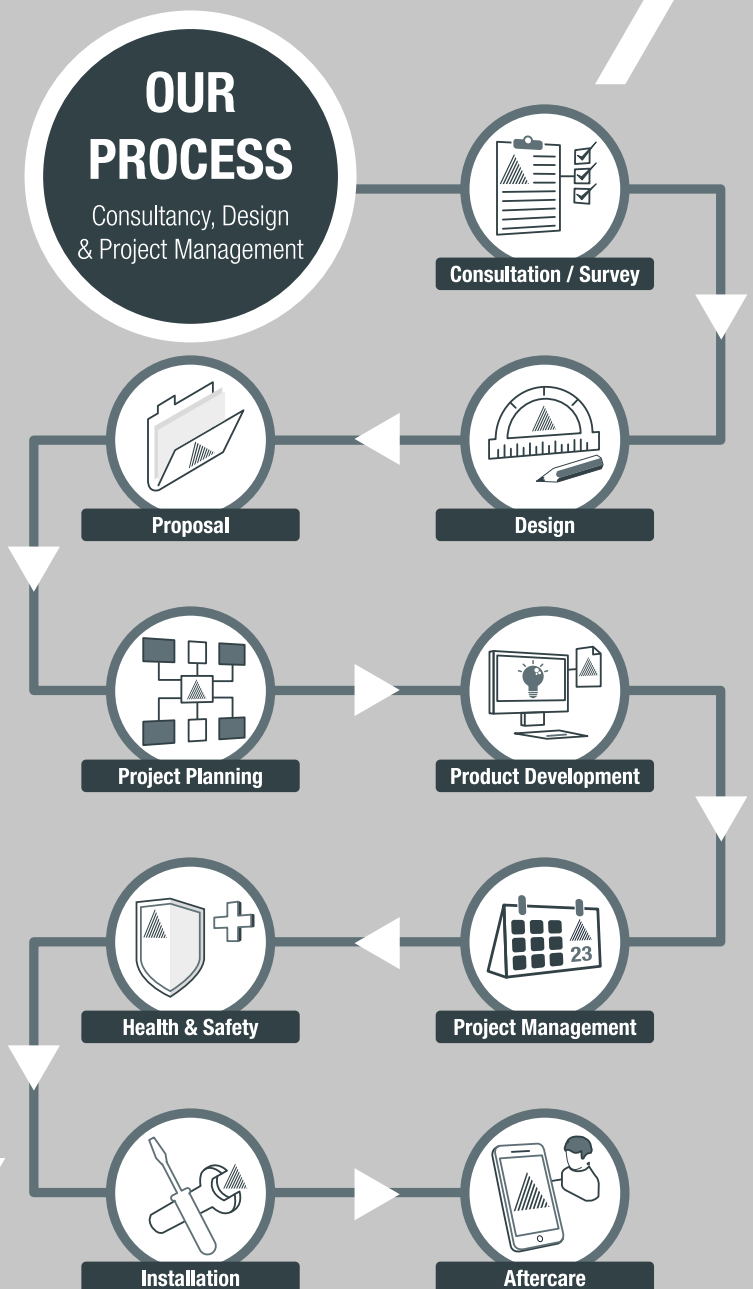
Avanta UK Ltd is an independent company with 20 years experience in designing and sourcing equipment. Long term partnership arrangements and rigorous appraisal of our portfolio of extensive manufacturing partners ensures that our clients have access to high quality and competitively priced standard and non-standard products.

Our specialities include mezzanine floors, storage systems (including warehouse shelving, pallet racking, longspan shelving and mobile shelving systems) and interior solutions (including office partitions, office storage, steel partitions, mesh security cages and workbenches).

We cover the whole of the UK and work closely with the major manufacturers offering warranty, peace of mind and on going support.

See more case studies at
www.avantauk.com

For a free, no obligation quote
Call - 0800 975 4933
Email: sales@avantauk.com



MEZZANINE FLOORS

PALLET RACKING

SHELVING SYSTEMS

STEEL PARTITIONS

OFFICE INTERIORS

WAREHOUSE AUTOMATION

WORKPLACE EQUIPMENT

WAREHOUSE FLOORING

PRINCIPAL CONTRACTOR

AVANTA

0113 384 8777

www.avantauk.com

sales@avantauk.com

Avanta UK Ltd

Unit 1, Matrix Court, Middleton Grove,
Leeds, West Yorkshire, LS11 5WB

