

AVANTA



CASE STUDY

**Turnkey Multi-tier
Mezzanine Floor Project for
Leading Multi-channel
Fashion Retailer**





Multi Tier Fire Rated Retail Mezzanine Floor Project

Leeds-based storage equipment specialist, Avanta UK Ltd successfully tendered for and delivered a turnkey warehouse improvement project for a leading multi-channel fashion retailer.

The client is long established in the fashion arena selling garments and footwear through mail order, ecommerce, franchises, concessions and its own stores.

Having completed a significant warehouse extension, the next stage for the client was to engage with a specialist storage equipment provider to optimize the storage capacity of the cubic space within the extension, improve pick rates and lock into the warehouse management system to service the afore mentioned channels.

Warehouse Storage Solutions

All items are picked from the BDCM1 Retail box / carton, and the system was designed around the box and the available space.

The solution included:

Two Tier Mezzanine Floor

The mezzanine floor came in at a healthy 4,271m² (46,083ft²) and is fire rated to 1 hour with suspended ceilings, fire enclosed staircases with fire escape doors.

There are 120 linear metres of handrail and temporary handrail, and safety netting was employed during the build of the mezzanine floor.

Ground and level 1 are to be used for the main storage and picking operation with the smaller level 2 to be used for bulk and overstock.

Lighting and Smoke Detection

PIR lighting was installed throughout the structure with power and data for the sortation and packing area benches also supplied and installed. Electrical supply was installed for the mezzanine floor goods lifts and conveyor system. Smoke / Fire detection system was a pre-requisite of the Building Regulations organised by Avanta UK.

Mezzanine Floor Goods Lifts

Floor slab preparation works took place for 2x mezzanine floor goods lifts to service all levels of the mezzanine floor took place. The lifts enabled the safe movement of products in totes between levels. Avanta oversaw the installation and the commissioning of the goods lifts to all relevant standards.

Warehouse Shelving Systems

Longspan Warehouse Shelving

Avanta UK designed, supplied, delivered and installed 1057 bays of BDC box storage shelving. Each shelf level is complete with a mesh shelf with integral divider for back-to-back storage of the picking boxes. This gave the client the capacity to store circa 58,000 BDCM1 boxes to pick directly from. The shelving system is designed to have no wasted space with the bay sizes designed around the box size.



**4,271m² Fire Rated
Two Tier Mezzanine**

**58,000 BDCM1 Box
Locations Created**

**3168 Returns
Locations Created**

**150m of Conveyor
Employed**

**40 Bespoke Pack
Benches Supplied**

Returns Shelving

No Internet retail warehouse is complete without a dedicated area or facility to store individual returned items. Avanta UK have designed and developed a returns shelving system that in this instance the 96 bays supplied gave the client circa 3168 return locations to pick from and re-work.

Sort / Pick / Pack Area Workbenches

With power and data to a specific area of the mezzanine floor, Avanta UK supplied 40x bespoke packing 2.1m length workbenches complete with louvre panels, base and upper shelves.

Conveyor System

Complete with bar code reading, warehouse management interface and service package, the conveyor package offers the client a quick, cost-effective method of moving products in plastic totes around the 3 levels. With powered rollers, decline belts and lift up transfers, this conveyor system is an efficient mode of transporting product around the warehouse to the pick pack area workbenches. There is circa 150m of conveyor on this project.

Picking Totes

2000 stack and nest containers 600 (L) x 400 (W) x 325 (H) mm with 15KG capacity in 4 colour ways were supplied for multiple picks in the trolleys and conveyor systems.

Trolleys

20 off bespoke picking trolleys designed and supplied. Each trolley is designed to accommodate and transport 12 totes.

Principal Contractor Role

With a project of this size / duration to conform with Construction (Design and Management) Regulations 2015 (CDM) Avanta UK Ltd acted as Principal Contractor (PC). This included full site set up with welfare facilities for all trades, full site supervision with suitably qualified site management throughout.

Avanta was responsible for full health and safety in the CDM area throughout the project.

To learn more about the Principal Contractor role, please visit Principal Contractor - Avanta UK

The Project

This turnkey project was a 2-phase programme with 60% of the fire rated mezzanine complete with shelving could accommodate stock that was originally bulk stacked in the warehouse extension. This then freed up the space to move to phase 2 and this included the remaining 40% of the mezzanine, conveyors, goods lifts and ancillary items.

The programme was 20 weeks.

Warehouse Improvement Project Contract Value

The contract value was circa £1.6 million.

Conclusion

Mezzanine floors are a fantastic way of increasing space without relocation. If the needs of the business evolve, then the space created can be re-purposed. For example, you could increase the pick / pack area and reduce

the returns area etc. as you see appropriate. To find out more about mezzanine floors please visit Mezzanine Floors - Mezzanine Flooring Systems - AvantaUK

Avanta Comment

"This was a fantastic project for Avanta UK with a great Northern based business. It has been in the planning stage for quite some time, and we are really pleased to see our design process come to fruition in this project."

Client Comment

"We have worked with Avanta and other storage equipment providers before, but never on a project of this scale and I am really pleased we chose Avanta to be our supply partner. We really could leave it to them to get on with the job and they delivered."















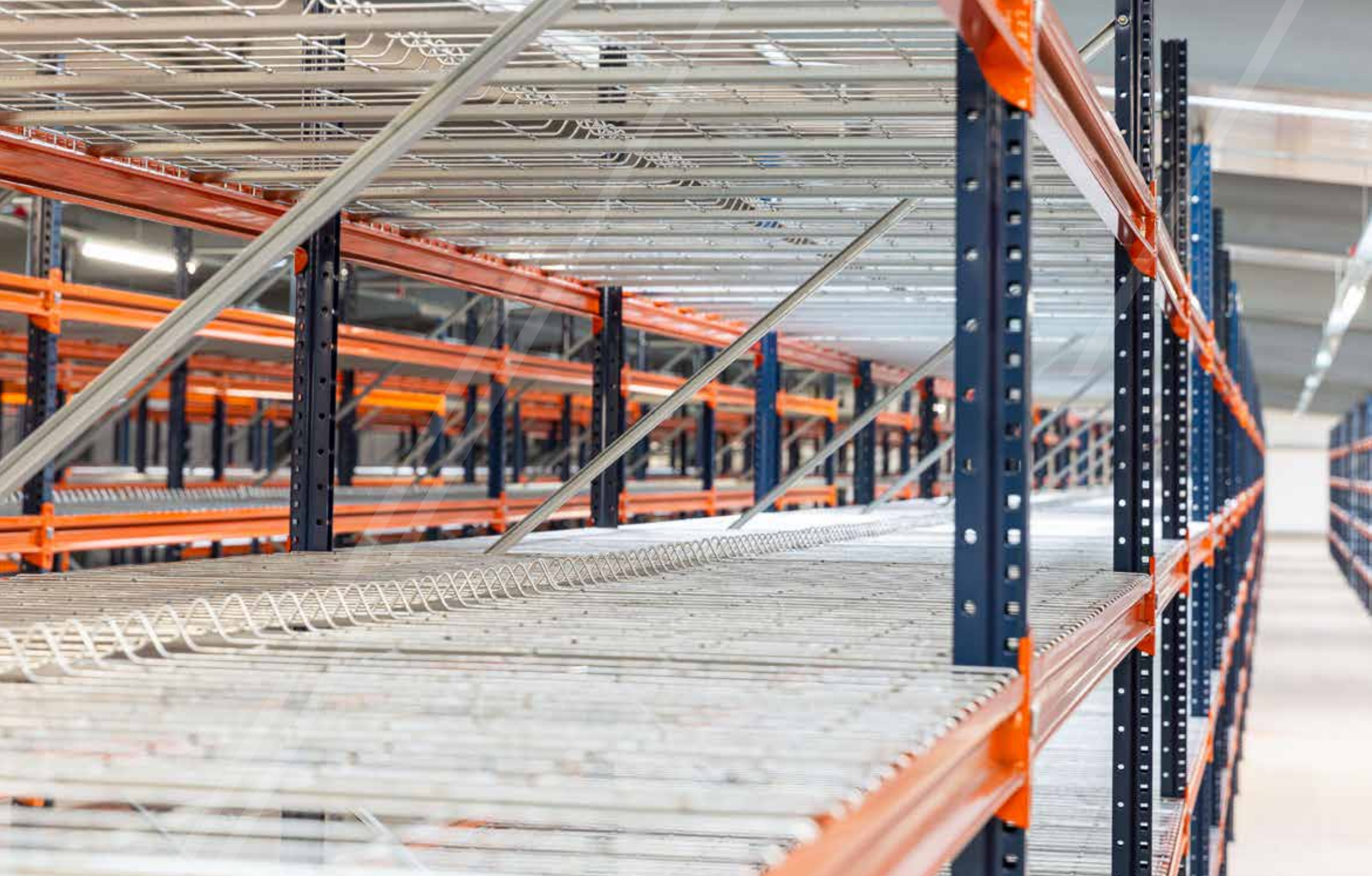












Avanta UK Ltd – Unit 1, Matrix Court, Middleton Grove
Leeds, West Yorkshire, United Kingdom, LS11 5WB

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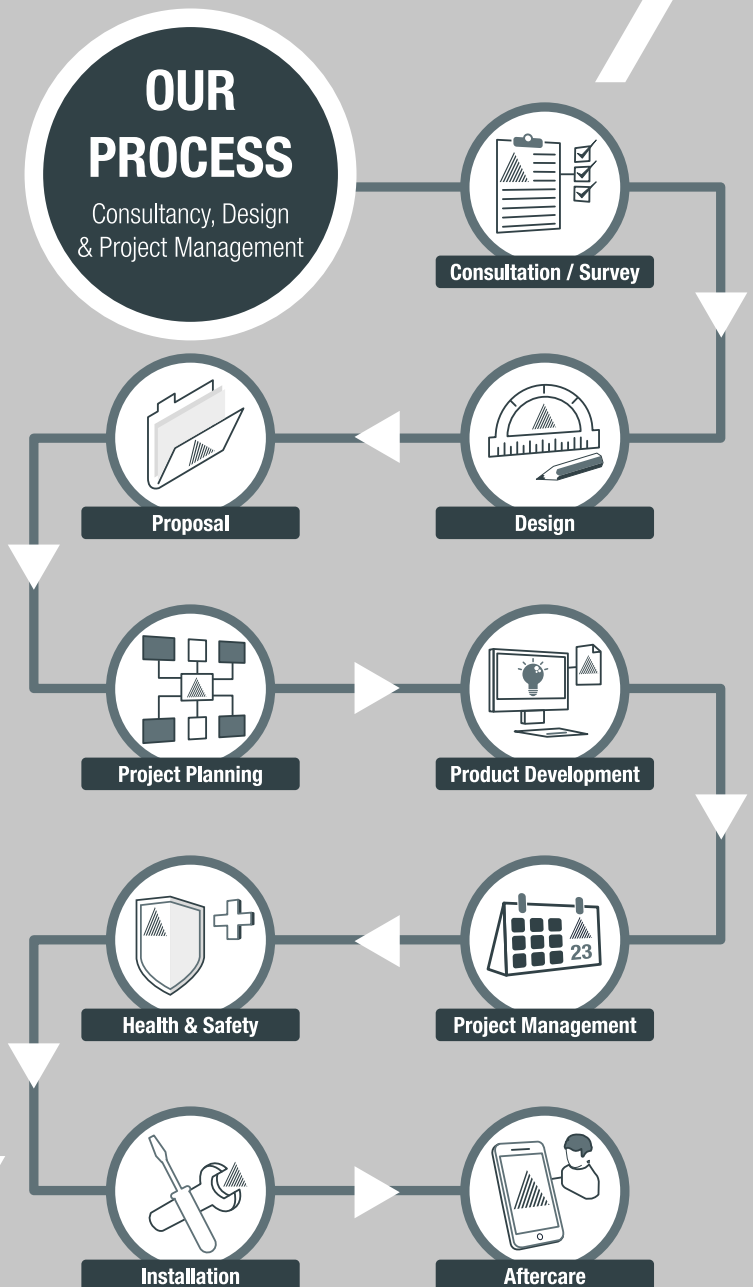
Avanta UK Ltd is an independent company with 20 years experience in designing and sourcing equipment. Long term partnership arrangements and rigorous appraisal of our portfolio of extensive manufacturing partners ensures that our clients have access to high quality and competitively priced standard and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



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AVANTA

0113 384 8777

www.avantauk.com

sales@avantauk.com

Avanta UK Ltd

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

