



JD Williams

Hadfield, Cheshire

105

- MAJOR RELOCATION PROJECT
- ON TIME - ON BUDGET
- BEST IN CLASS EQUIPMENT
- FUTURE PROOF



Key Highlights

The SDI Group Solution for JD Williams

AUTOMATED SOLUTION - A GOH automated warehouse solution with a capacity for 420,000 individual garments including complete fit-out of the facility including mechanical and electrical services such as sprinklers, lighting, fire detection and HVAC.

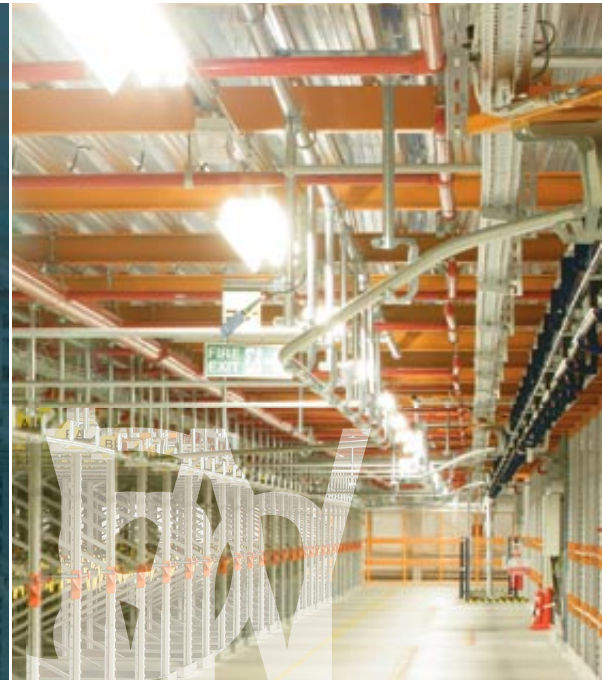
PARTNERSHIP APPROACH - SDI's unique consultancy approach resulted in a turn-key solution including M&E Services

UNRIVALLED SERVICE – an innovative consultancy approach combined with on-time installation ensured minimal downtime and effective consolidation of GOH warehousing operation

ENHANCED OPERATION – the solution has increased operational efficiency, by reducing storage overheads and transport costs, whilst streamlining garment supply chain processes

FLEXIBILITY – the solution needed to have built in capacity for future acquisitions, consolidation and expansion

JD Williams



THE CHALLENGE

JD Williams, one of the UK's largest home shopping retailers, required a new garments on hangers (GOH) automated materials handling solution at the company's warehouse at Hadfield in Cheshire. All of JD Williams' catalogues offer a huge selection of clothing designed to provide the best fit at the best value for all ages and sizes, so an innovative solution was required to handle storage for the many ranges the retailer offered.

JD Williams had previously used two GOH storage sites, but was looking to consolidate its requirements into a single warehousing operation. The company was also in negotiations to purchase rival home shopping business Gray & Osbourn – with a view to transferring the hanging garment volumes into the new facility – so it was critical that the GOH storage system was completed on-time to minimise any operational disruption.

THE SOLUTION

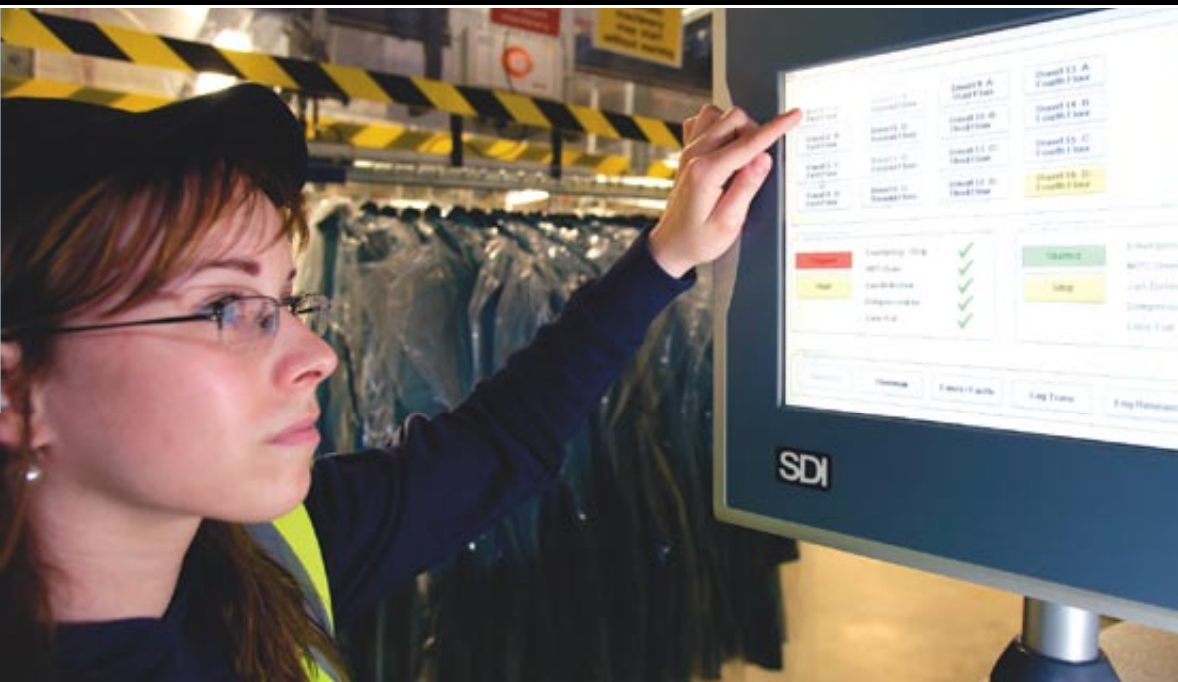
SDI Group was originally approached to design and develop a standalone garments on hangers (GOH) warehouse system. However, following several site visits to other SDI Group customers, the company was invited to submit a turn-key proposal for the complete fit-out of the facility including mechanical and electrical services such as sprinklers, lighting, fire detection and HVAC.

Following a successful tender process, SDI Group designed and installed a storage and conveyor system, which integrated into the new purpose-built warehouse. The four-tier GOH structure comprises two powered loops and three retractable receiving booms, providing capacity for 420,000 individual garments.

JD Williams had initially considered building the GOH system on top of a concrete mezzanine, which would have formed part of the building structure.

This type of solution is both expensive and time consuming, and the company was looking for a cost-effective, fast-track application. SDI Group suggested using a 9 x 7 metre structural steel grid that not only saved on building costs, but also enabled the build programme to be completed within a tight delivery deadline.

Overall, the GOH warehousing solution allowed JD Williams to consolidate three existing facilities into the single site, significantly reducing overheads by removing warehousing and transport costs from its operation. Furthermore, the installation was completed and operational in time to absorb the recently acquired Gray & Osbourn hanging garment stock.



THE SYSTEM

SDI Group has developed an automated materials handling system that provides a straightforward and simple GOH solution. It utilises two powered loops – one taking garments in on the right-hand side, whilst the other one takes garments out on the left-hand side – as well as incorporating an innovative trolley system using radio frequency technology, to provide cost-effective and efficient routing.

The receiving area includes three retractable receiving booms and eight buffer lanes. Garments are loaded directly onto RF-tagged trolleys and manually pushed within a buffer area directly behind the loading door. The system has provision to fast track garments through to Pack & Hold, by-passing the storage floors completely.

Garments are fed to the GOH storage areas via a power and free trolley conveyor. The RF-tagged trolleys are

manually pushed from the holding areas to Trolley Coding Station (TCS), and assigned to one of nine destinations – three per floor – within the Goods-In Area by the operator from a touch screen panel. The TCS has an approximate flow-rate capacity of 9,000 garments per hour.

The GOH storage area consists of different modules located on each of the three levels. Trolleys are diverted automatically from the power and free transfer conveyor along perimeter traffic rail which runs down the length of the module at the loading-in side. There are 35 storage aisles on each floor, served by traffic rails down the centre with manual switches off the un-driven perimeter traffic rail.

Garments are manually off-loaded from the trolleys and loaded onto the garment storage rails in the GOH modules. The opposite side of each module has a traffic rail for the out-

feed of garments to shipping. There are multiple by-pass switches provided down each aisle so that trolleys may be diverted around other product being picked so multiple picks may be done in any module simultaneously around the system.

A separate Power and Free system will move garments down through the floors to twelve Pack and Hold storage lanes, enabling JD Williams to queue up to 4,320 garments prior to cartoning ready for shipping. Garments are packed into cartons and then placed into roll cages for manual dispatch.

Ten pairs of dual sided work-stations handle the returns process, which are unpacked, transferred to hangers and loaded on trolleys for initial storage, before being transferred TCS coding and storage. Elsewhere, a secure cage has been provided to store up to 600 sample garments.



ABOUT JD WILLIAMS

JD Williams markets clothing and household and electrical goods from more than 20 successful catalogue brands, including Ambrose Wilson, Fifty Plus, Gray & Osbourn, Oxendales, Shapely Figures, Shoe Tailor and Viva La Diva. Continuing growth has ensured JD Williams has become the most successful direct home shopping company in the UK today, with over 5 million customers and 3,000 employees.

ABOUT SDI GROUP

SDI Group is a leading specialist in the provision of integrated materials handling solutions for retail, wholesale, fulfilment and e-commerce distribution operations.

The Group's collective experience and expertise encompasses the entire spectrum of distribution centre operation and infrastructure, from consultation, design and building to installation, maintenance and support. As a global systems integrator, the Group designs solutions which improve productivity and retail sales margin while supporting sales growth.



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