

CROSS-DOCKING THE SUPPLY CHAIN PROVIDES GROWTH PLATFORM FOR GRAHAMS BODYCARE

Grahams Bodycare is the independent branded-bodycare retailer owned by GR & MM Blackledge plc. Based near Preston, Lancashire, Grahams was formed in 1970: with a 2004 turnover of £134 million, it now employs 1,600 staff across 120 High Street outlets across the Midlands, north of England and Scotland.

Competing head-to-head for customers with retail giants like Boots plc, Superdrug and the major multiple supermarkets, Grahams' success relies on a nimble and responsive supply chain. One that can flex with changing consumer choice and ensure that the right products – from hair grips to shower gel - reach the right stores at the right time, every time.

Delivering this level of flexibility requires a strategic approach to warehouse and supply chain planning: Grahams appointed Wokingham-based Total Logistics – one of the UK's leading supply chain consultancies – to help design and oversee the implementation of a 21st century warehousing solution to form the basis for the company's future growth plans.

Tough Retail Environment

Today's UK retailing environment is a tough place to be. Household incomes are under pressure from oil price increases that have forced up utility and petrol bills, there are doubts over the property market and uncertainty over possible tax rises. Accordingly, consumers are simultaneously more discerning and cautious and growth in disposable income levels is well down on a few years ago to make the retail environment much more competitive. Some major retailers have sought retrenchment through merger - Boots and Alliance Unichem for instance - plus discounters, Internet e-tailers and increased premises rents are having a major impact too. These combined factors are unlikely to ease quickly which means that more than ever, operational efficiency is the key to maintaining competitiveness, developing customer loyalty and exploiting opportunity.

A well-established business, Grahams Bodycare is playing the long game and believes that increased efficiency and flexibility at the supply chain level is the right place to add long term value to its bottom line.

The company had also reached a timely crossroads: until recently, Grahams had a bulk warehouse and a separate picking warehouse, the lease on which was due to expire. This made for an ideal time to re-engineer the entire warehousing operation and Total Logistics was involved from the outset in scoping the changes necessary.



Grahams' new integrated distribution, warehousing and head office site at Matrix Park

Making Changes

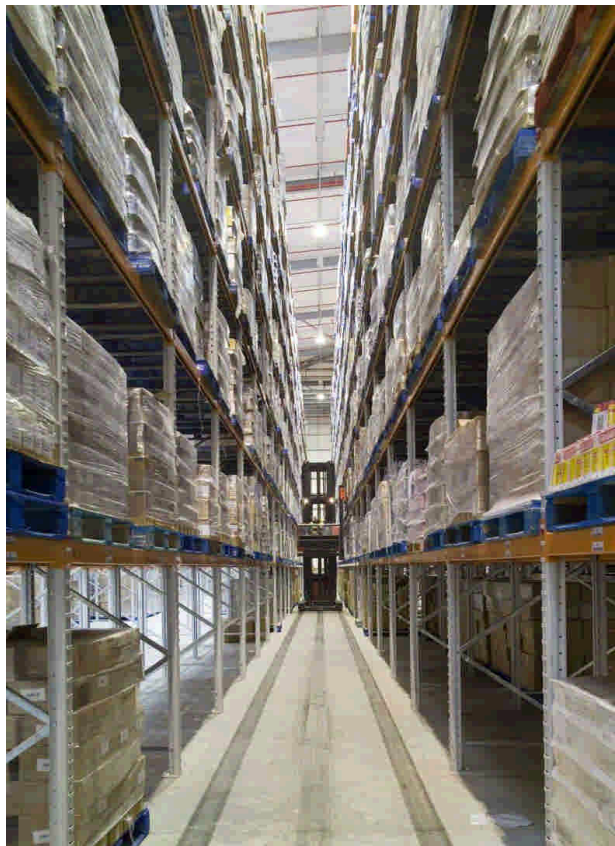
Grahams original warehousing facility comprised a single storey 100,000 ft² distribution centre and a 39,000 ft² bulk storage centre with 10,000 pallet spaces in the High Bay; a team of 70 serviced the orders using a range of mechanical handling equipment across two eight-hour shifts each day. The picking operation involved batch picking orders onto conveyors and then using a simple mechanical sorter to separate individual store orders. A number of operational issues had developed that needed to be addressed.

The company found that incoming product was not 100 per cent checked at carton level, increasing the risk of signing for goods that had not been received. Inners picking on walkways was creating large amounts of plastic and cardboard waste that was untidy and labour intensive to collect. Plus the walkway layout meant that the distances to pick orders were often excessive and there was a bottleneck at the point of scanning prior to sortation.

The sensible option was to solve all the operational issues by re-configuring the entire warehouse system and in the process, exploring the opportunities for moving to a more cost and space efficient site. In redesigning the warehousing function, it became clear to Grahams that they could save space, time and money by moving to a cross-docking solution.

Cross-Docking

Cross-docking is an increasingly common logistics technique that rapidly consolidates shipments from multiple sources in order to gain economies of scale in outbound delivery. It essentially eliminates the inventory-holding function of a warehouse while still allowing it to serve its consolidation and shipping functions. Crucially, the incoming shipments are transferred directly onto outbound delivery vehicles to satisfy waiting orders without storing them in between: cross-docked deliveries are typically processed in as little as one hour of delivery. This effectively turns the warehouse into a giant conveyor that is constantly processing orders and replenishment, minimising a company's capital outlay on static stock that's more usually stored in the High Bay.



The removal of storage areas in the picking warehouse has reduced the risk of theft and damage

Cross-docking not only ensures one can deliver Just-in-Time (JIT) replenishment at the store or customer level: it also enables the creation of a JIT warehouse that's more efficient with space, resources and capital.

Grahams opted for a cross-docking solution to replace its historical 'receive, store, pick and sort' arrangement. Goods would be booked in from suppliers or from the bulk store and immediately fed to a sortation system, which would then sort the products by destination store. Each product would be allocated to stores and sorted in its entirety, removing the need to store residue product.

Total Logistics worked closely with the Grahams team to develop a number of cross-dock options for sortation, ranging from manual picking to automated sortation: after assessment and performance analysis, automated sortation in a new, multi-level warehouse was chosen.

An Integrated Approach

Roy McFarlane, operations director for Grahams Bodycare takes up the story: "Total Logistics has helped us with a strategic re-alignment of our business that has taken two years to deliver from planning through to final implementation. We've been able to move from a 139,000 ft² footprint of single-storey storage in two warehouses to one of just 80,000 ft² at our new integrated distribution, warehousing and head office site at Matrix Park. The new High Bay covers 40,000 ft² with a further four floors of 40,000 ft² - plus three storeys of office space - to give us a 200,000 ft² warehousing facility with a footprint of less than half that. We've also been able to halve the shifts to a single eight hour shift per day."

A key element to cross-docking is the technology infrastructure that supports it. Grahams developed their own Windows-based proprietary warehouse management system (WMS) networked across Dell desktop computers that needs just three people to manage all day-to-day order traffic bound for the retail network.



More than 7000 cases per hour can be processed in the DC

Working with Total Logistics to combine the integrated facility with new mechanical handling equipment and a powerful WMS, Grahams has significantly enhanced efficiency of its distribution operation that can process in excess of 7,000 order cases an hour. A combination of large and small chutes and totes are ideal for the variety of product sizes; loading product onto the sorter on receipt allows a 100 per cent quantity and product verification check that catches any discrepancies early; the removal of storage areas in the picking warehouse has reduced the risk of theft and damage; and overall inventory levels have been reduced by eradicating the need to hold central stock of the main product lines.

Plus operator headcount has been reduced delivering savings on payroll; the accuracy of deliveries to the store network is now guaranteed; packaging is removed wherever possible and disposed of at the point of induction to the sorter, reducing the amount of litter in the warehouse - plus a smaller bulk store now integrated into the conveyor system provides capacity for opportunity purchases and seasonal lines.

Delivering Business Benefits

McFarlane picks up the story again: “Importantly, we’ve been able to reduce mechanical and manual product handling while simultaneously increasing throughput: product is scanned just once as it enters the warehouse and we’ve found cross-docking our store deliveries to be 50 per cent faster than before. We poll the stores overnight to collect sales data and our inventory system recalculates the store-by-store stock requirements on a priority basis. Instead of having to commit our 18 delivery vehicles to a daily schedule of deliveries, we can now work on a weekly replenishment cycle that keeps our stores properly supplied between one and three times a week. That means less impact on our drivers, our vehicles, lower diesel bills, lower mileage and reduced environmental impact.”

Grahams’ managing director and co-owner Graham Blackledge is delighted with the results of the two year project: “With the help of the Total Logistics team, we’ve moved the business to exactly where it needs to be and given ourselves a very solid, high capacity platform to match our growth plans. The warehousing operation is very efficient with a better working environment that’s cleaner and quieter. Plus it’s good for our people to know that they are working at the leading edge of supply chain management – that in itself ensures that we continue to attract the best people to work here. Retailing faces immense pressures today and the trick to handling those pressures and staying sharply competitive against much larger rivals is ‘light-touch’ product handling that’s geared for efficiency and flexibility.”

Total Logistics was also retained to support vendor selection and implementation. The sorter chosen was from FKI Crisplant, with pallet conveyors by Univeyor and the consultancy team worked with Grahams through to completion of the contract and commissioning of the system in mid-2005.

Concludes Blackledge: “Another key area where the Total Logistics team has been able to help us has been in contract management where their formal tender process has ensured us value for money – and continues to do so.”

The result of the project has been a complete recalibration of the way Grahams manages its business that makes the most of efficient warehousing and distribution techniques. The cross-docking system is now delivering significantly higher, more accurate throughput with greater productivity than was achieved before.