

FORTNA

Customer Success Series

# Frasers Group Partners with FORTNA to Redefine Distribution Performance



FRASERS  
GROUP

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## About Frasers Group

Frasers Group started as a small store in Maidenhead in 1982 and grew to become a global powerhouse. As the business evolved, 2019 saw the rebrand of Sports Direct International to Frasers Group plc; a reflection of the Group's growth and change in market identity. Today, the Group commands an impressive £5+ billion annual retail business (FY 2024), operates over 1,300 retail locations across Europe, and reaches customers in more than 100 countries, supported by a dedicated global team of over 30,000 employees.

Frasers Group's journey is driven by a bold vision: to create the planet's most admired and compelling brand ecosystem of sports, fitness, premium lifestyle and luxury brands. Achieving this ambitious goal requires more than just a retail presence and e-Commerce leadership: it demands completely rethinking customer experience, end-to-end.

## The Mission

Recognizing logistics as a key growth lever, Frasers Group partnered with FORTNA in 2017 to revolutionize their fulfillment processes. The mission? To transform predominantly manual operations in Shirebrook into one of the most advanced, flexible and scalable warehouse facilities in the UK, powered by cutting-edge automation and software. This state-of-the-art distribution center is now a cornerstone of the Group's fast-paced expansion and fearless approach to redefining modern retail, enabling substantial e-Commerce growth and continued expansion through acquisitions.



## The Challenge

With ambitions expanding fast, Frasers Group faced a critical logistics challenge: how to scale sophisticated warehouse capabilities within the constraints of its existing distribution center in Shirebrook, UK.

The site itself was impressive—spanning over 200,000 square meters and reaching 12 meters in height—but operations had been stretched to their limits. Space was fully utilized, manual processes dominated and with every new retail location, brand acquisition and surge in e-Commerce, pressure was added to its operations.

Frasers Group needed a multi-level elevation strategy for future warehousing and distribution operations, and FORTNA was brought in to turn constraint into competitive advantage. Their mission: to unlock scalable, high-performance fulfillment within the same footprint, with minimum disruption of ongoing operations.

## The Project

### **Designing Scalability: Warehouse Automation as a Growth Engine**

FORTNA and Frasers Group developed a forward-looking automation strategy to match Frasers Group's rapid growth goals. Working within the existing footprint, they designed advanced operations that combined robotic AS/RS AutoStore-based goods-to-person (GTP) order picking, a high-performance shuttle warehouse, Geekplus AMRs for specialized warehousing and picking—for garments on hanger and luxury goods—and state-of-the-art sorter technology. The goal: future-proof distribution operations, scalable and flexible by design, to accommodate the shifting priorities and rising capacity demands of a highly ambitious customer in volatile times.

Since the project's inception and during ongoing integration, the required SKU warehouse capacity had tripled since 2019—a powerful indicator of the Group's expansion and product diversity. The execution was structured in carefully sequenced phases. Reducing the dependency on manual labor was key, particularly in order picking, to both speed up time-to-ship and reallocate workforce to other functional areas.



## The Solution

Together with Frasers Group, FORTNA defined a roadmap to transform operations at the Shirebrook distribution center into a high-performing fulfillment engine, based on a continuous pull-based design. Meeting the ambitious throughput and capacity goals set by Frasers Group required more than a standard solution or off-the-shelf components. FORTNA approached the project with an unbiased focus on the individual customer objectives, designing a solution that combined the most suitable technologies from multiple suppliers into one scalable system. Integrating and controlling such a diverse system landscape is a complex task—successfully mastered by the FORTNA WES™ (warehouse execution system).

### **Delivering High-Throughput Excellence with AutoStore**

At the core of Frasers Group's new distribution operations is a high-density storage AutoStore installation: a high-throughput, goods-to-person automation system designed to maximize speed, scalability and operational efficiency. Spanning eight sub-grids for optimal performance and built-in resilience, the system ranks among the largest in Europe.

With 920,000 bins, 555 robots and 144 ports, the Shirebrook AutoStore installation can present up to 8,500 bins per hour and manage over 1 million SKUs, thus enabling rapid, accurate fulfillment at scale. The rollout was executed in nine carefully sequenced phases, allowing Frasers Group to realize early benefits while progressively ramping up to full capacity.

### **Goods-to-Person Picking: Speed, Efficiency and Ergonomics by Design**

The AutoStore grids supply 34 GTP ergonomic workstations for flat pack goods and accessories, equipped with put-to-light technology for fast, error-proof and fully scalable order picking, and 24 workstations dedicated to shoe fulfillment. The design reduced combined operator travel by 22 kilometers daily, while increasing performance to 8,500 picks per hour and up to 70,000 orders per day. These advancements led to a 40% reduction in manual picking labor, allowing personnel to focus on higher-value tasks. By blending unit sortation, ergonomics and automation, Frasers Group now runs streamlined picking operations that fully support additional omnichannel growth while reducing labor dependency.



### **Three Challenges, One Solution: Geekplus**

When high performance is required within a limited footprint, every cubic meter must be utilized. In the case of the Frasers Group's Shirebrook project, that meant unlocking the space above the AutoStore grids. On a dedicated mezzanine, over 100 Geekplus autonomous mobile robots (AMRs) operate seamlessly across one unified system to process three distinct groups of items: garments on hanger—stored and presented for picking by the AMRs on rails—and over 4,100 1.2 x 1.2 m shelves that not only serve for processing non-conveyable items but also create a safe storage area for high-value inventory such as jewelry, watches and fragrances. At 12 goods-to-person workstations, items are picked for both retail distribution and e-Commerce.

### **Shuttle Warehousing: Buffering and High-Velocity Picking**

The 22-aisle shuttle warehouse, equipped with more than 370 shuttles and 300,000 double-deep storage locations, is an integral part of the Shirebrook distribution center. Operating at a peak capacity of 14,000 dual cycles per hour, it serves as a sequencer, balancing the load across other fully automated systems. In addition, it buffers and optimizes inbound storage into the pallet warehouse through eight pallet build diverts. Looking ahead, 32 additional goods-to-person workstations will be directly connected to the shuttle warehouse to support high-velocity picking operations.

### **High-Speed, High-Capacity Sorter Systems**

To support the rapid, high-volume demands of both retail replenishment and e-Commerce fulfillment, Frasers Group deployed two cross-belt sorter systems at the Shirebrook facility. Together, they are a decisive backbone of the operations as they not only support outbound processing but also interconnect functional areas within the warehouse. Each cross-belt sorter is equipped with 10 semi-automated induction stations and can handle up to 20,000 units per hour across 700 chutes per sorter with 1,400 destinations. They provide case and item-level sorting directly into rolling stillages, supporting outbound shipments to over 1,300 retail locations across the UK and Europe.

Complementing this is a high-performance parcel sorter, featuring a camera-based scanner system and dynamic assignment across 50 chute diverts and 3 fluid loading boom conveyors. This enables late-stage order flexibility—ensuring improved cut-off times for orders placed within 24 hours. Items are either diverted into pallet boxes or routed for loose loading directly into vehicles via three induction lines. Together with additional automated systems for printing and applying labels, auto-boxing and auto-bagging, these integrated systems enable seamless sorting from full-case inbound to final dispatch, supporting Frasers Group’s need for speed, accuracy and operational agility.



## The Result

### A Warehouse Built for Performance, Profitability and the Future

As the current transformation nears completion, Frasers Group is already realizing operational, business-critical gains. What began as an initiative to modernize a manual warehouse has evolved into one of the UK's most advanced distribution centers—now a strategic asset driving Group-wide efficiency, cost rationalization and scalable growth. Frasers Group reduced gross stock holding by over £100 million (\$134.6 m) year-over-year, an approximately 15% improvement in inventory efficiency, through tighter stock control, streamlined processes and centralized warehousing.

With automation now embedded across the facility, the new operational design has delivered a 40% reduction in labor required for picking, allowing redeployment of staff into other high-impact areas of the warehouse. The facility now supports 24/7 operations across three shifts, maintaining consistent throughput and service levels even during peak periods. With the capacity to process up to 4 million units weekly across a footprint of over 200,000 square meters, the system is built to scale with demand and flex real time to changing requirements.

The redesigned infrastructure has enabled the seamless integration of three additional business units, FRASERS, FLANNELS and Jack Wills, into the Shirebrook site. More importantly, it now aligns with Frasers Group's fast-moving business model by scaling with demand, adapting to evolving storage and processing needs, and supporting both high-efficiency daily operations and long-term growth.

40%

reduction of manual  
picking labor

2.2M

e-Commerce orders  
maximum per month

12.2M

units in retail peak months

“Today in this 3 million square foot warehouse, we are providing to our customers more than 450,000 SKUs. Going forward, our main target is to be more efficient and more productive, but equally to be listening to our customers and being able to provide what they require from us. And for that, FORTNA has been a good partner.”

**Michel Piotrowski**  
Head of International Logistics, Frasers Group



# FORTNA

## About FORTNA

FORTNA partners with the world’s leading brands to transform omnichannel and parcel distribution operations. Known world-wide for enabling companies to keep pace with digital disruption and growth objectives, we design and deliver solutions, powered by automation, robotics and intelligent software, to optimize fast, accurate and cost-effective order fulfillment and last mile delivery. Our people, innovative approach and proprietary algorithms and tools ensure optimal operations design and material and information flow.

Contact us today at [www.FORTNA.com](http://www.FORTNA.com)