FORTNA

Customer Success Series

PEP Creates Capacity for Future Growth With New Distribution Center (DC) in Hammarsdale, South Africa

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New building, design, implementation and lifecycle performance services: Pepkor partners with FORTNA to successfully complete a major logistics project for PEP in South Africa

Capacity for an annual throughput of up to 520 million units, increased fulfillment performance, optimized routes, and reduced storage and transportation costs — several goals Pepkor aims to achieve with the newly implemented logistics center in Hammarsdale, South Africa. The new building is designed to meet the specific warehousing and order picking requirements of the clothing, footwear and home assortment of Pepkor's subsidiary PEP, one of South Africa's leading clothing retailers. With an operational space of 145,000 square meters, the Hammarsdale distribution center (DC) will handle the supply of over 2,000 PEP and PEP Home stores. PEP commissioned FORTNA with the solution design, on-time implementation (with go-live in Q3 2023), and further quality assurance for this large-scale greenfield project.

About PEP

Founded in 1965, PEP is a multinational company headquartered in Cape Town, South Africa, with over 2,600 stores. The product range extends from clothing and footwear to home textiles and other household goods. PEP is a subsidiary and the largest retail brand of Pepkor Holdings Limited, within a portfolio containing multiple clothing, furniture and electronic goods retail brands. With 36 distribution centers, 22 regional hubs and over 5,800 store locations, the group covers a wide area in 10 African countries and Brazil.

The project

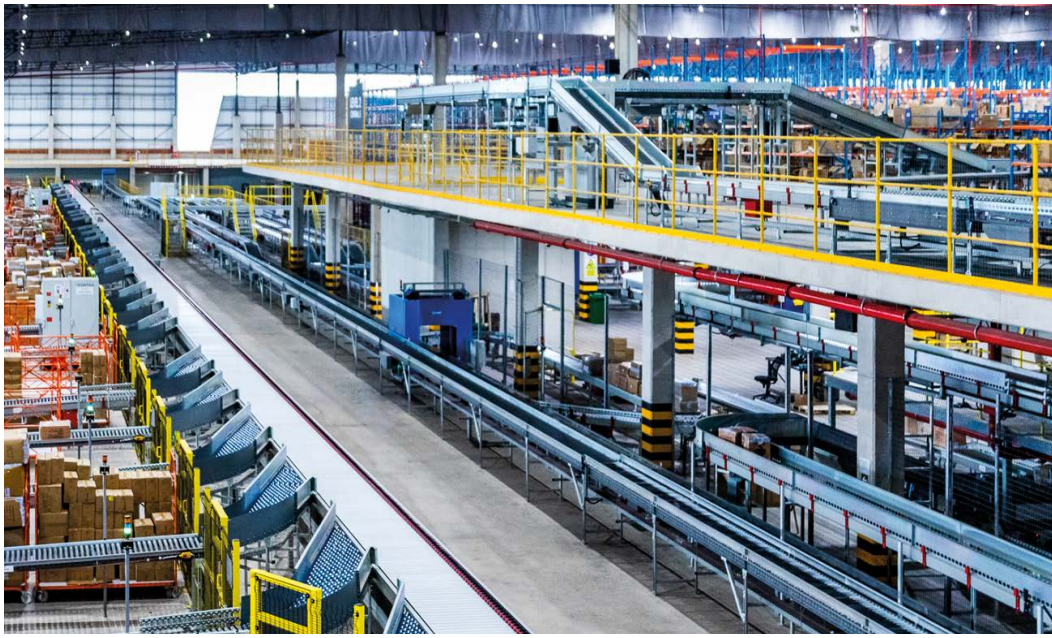
Responding to the continued growth of the retail sector and to further expand its retail leadership position, PEP is pursuing a consistent growth strategy that is supported and enabled by creating corresponding warehousing and distribution capacities. The benefits this specific project achieved for PEP are more efficient use of resources, lower warehousing and fulfillment costs, improved retail store service levels through accelerated DC processing, and lower last mile shipping costs from packaging efficiencies. The Hammarsdale DC is a strategic hub due to its proximity to Durban, the largest shipping port in South Africa, and inland transport links to other major cities.

> Maximum speed and efficiency in the handling of goods are crucial in our business in order to meet continuously increasing customer expectations. We had outgrown our Prospecton DC in Durban, which could no longer provide the necessary performance to meet demand. We decided to construct a new distribution center in Hammarsdale.
>
> **Rudi Craeye**
> Head of Supply Chain at PEP

The solution

Together with the FORTNA team, which has been supporting PEP's logistics expansion projects for several years, a solution was designed to meet the company's current and future needs.

While the operation in the Hammarsdale DC went live, the Prospecton DC continued to operate. This was done to mitigate risk, a very important factor



in a project of this size. The complexity of transitioning between the old and new facilities must not be underestimated, calling for detailed transition planning, allowing PEP to align the ramp-up volume at the Hammarsdale DC with ramping down and effectively closing the Prospecton DC.

The benefits this specific project aims to extract for PEP are more efficient use of resources, lower warehousing and fulfillment costs, improved retail store service levels through accelerated DC processing, and lower last mile shipping costs from packaging efficiencies. Hammarsdale is a strategic hub due to its proximity to Durban, the largest shipping port in South Africa, and inland transport link to other major cities. The FORTNA design takes all the specific requirements of fulfillment and the diverse PEP product range into account to achieve maximum efficiency and throughput.

Based on the forecasted growth of up to 520 million units throughput per year, a required building footprint of 90,000 square meters was derived.

Features of the new operations include

Mezzanines were added to distribute operations over two levels and provide an additional 55,000 square meters of operations, economically maximizing the vertical space of the building. PEP's operations must handle rapid changes of products and multiple supply runs to 2,000+ stores per week. Handling such a high volume of varying SKUs through a high-speed process requires fulfillment processes that are both robust and flexible. The core of the design is a high-performance order picking system that is connected across all building levels by conveyor systems.

> The mezzanine floors are dedicated to the put-to-store, pick modules and high-speed case sorters. With a sortation rate of 150 cartons per minute, sortation of cartons across 30 shipping destinations is accomplished with ease.
>
> **Fayyaaz Akoob**
> Project Owner and Technical Executive at FORTNA

Software maximizes efficieny and control

FORTNA's proprietary software ensures maximum efficiency and optimum use of resources. FORTNA WES™ (warehouse execution system) integrates the various logistics technologies, the conveyor technology and the warehouse management system (WMS) in a high-performance, homogeneous overall system.

The effects are increased visibility, detailed control of manual and automated processes, and optimized use of logistics and warehouse technology.

Operations at the Hammarsdale site are designed for both direct-to-store and regional hub shipments. Special attention was paid to the efficient, high-performance handling of all resulting cross-docking processes. Shipments that can be allocated to pre-processed orders will be cross-docked directly from inbound without intermittent warehousing. They are either loaded directly into a waiting truck via the sorter system or stored in dedicated areas in the shipping dock where over 500 cartons per hub can be accommodated. This illustrates the size of the range and the quantity of goods handled at PEP.

In terms of holistic design and efficient use of existing resources, PEP not only made the most of the internal logistics processes in the current project but also took sustainability into account.

Renewable energy and resource efficiency

The building design team allowed for the roof of the new distribution center to be fitted with solar panels to generate renewable energy to operate off-grid during sunlight hours. Rainwater is collected and purified to the volume of self-sufficiency, thereby addressing the water shortage typical for the region. PEP also uses recycled shipping cartons for the upstream steps of the carton preparation process.

> Thanks to the support of the FORTNA team, we have implemented an efficient, scalable solution that provides the needed flexibility. The new operations offer maximum customer service and give us the opportunity to position ourselves for the future in line with retail requirements.
>
> **Tertius van Wyk**
> Supply Chain Solutions Manager at FORTNA

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FORTNA Can Help

Does your operation need to increase capacity, consolidate locations, streamline processes, speed up delivery times, boost efficiency and performance, or respond to transforming customer demands? FORTNA can support your organization in achieving your operational goals by providing solid expertise, a holistic approach and best-fit solutions, powered by automation, software and robotics.

Contact us today at www.FORTNA.com