

# SEMIR IMPLEMENTS AGILE SUPPLY CHAIN

China's Leading Retailer Implements  
Solutions to Support Multi-channel  
Business

## OPERATIONS

Headquarters: Shanghai, China  
Distribution centres: Shanghai, Wenzhou  
Total capacity: Over 300,000 sq. ft.  
(28,000 sq. m)

## MANHATTAN SOLUTIONS

Warehouse Management

森馬  
Semir



## CHALLENGE

Semir needed a highly intelligent supply chain technology platform to manage the short lead times that exist within the apparel industry, the increasingly discerning nature of customers, and the complexity of SKUs in its warehouses.

## SOLUTION

Manhattan's Warehouse Management solution was selected for its ability to deliver measurable ROI and productivity gains in inventory management, labour management, warehouse efficiency and physical space utilisation.

## PROGRESS & RESULT

Within the distribution centre, Semir has seen picking efficiency improve by 60 percent, labour costs cut by 40 percent and space utilisation improve by 30 percent. By accelerating goods flows, Semir is now able to process 350,000 individual pieces in a 7-hour order preparation window.

"Despite the increasingly complex and fast-moving nature of the fashion industry and the supply chain that supports it, Manhattan's technology has provided us with a platform that allows us to be agile and enables us to provide a reliable and consistent service across the multiple channels that we operate."

ZHANG ZHENLIN, LOGISTICS DIRECTOR, SEMIR

# REPARING FOR MULTI-CHANNEL GROWTH

at Semir

**“We were keen to adopt an advanced supply chain system that would enable us to meet the fast-changing needs of our customers and which would provide a solid foundation for sustainable business growth. We strongly believed that an investment in a marketleading supply chain technology platform that was proven in a multi-channel retail environment would be the key to helping us deliver on these objectives.”**

## MANHATTAN WMS IMPLEMENTED IN SEMIR DISTRIBUTION CENTRES TO SUPPORT BUSINESS GROWTH

Founded in 1996, The Semir Group is a leading and well-known apparel company in China. The company sells its merchandise via 7,500 sales outlets trading under the Semir and Balabala labels and via a strong online offering. By outsourcing production to more than 160 ‘high productivity and high performance’ partner manufacturers, Semir is able to rely on a sourcing network that includes the strongest apparel manufacturers from the Pearl River Delta and Yangtze River Delta economic zones and those operating out of the cities in the Shandong and Hubei provinces. The company is now recognised as one of the top ten most competitive brands in China’s apparel industry.

To support its ever-expanding business, Semir architected its supply chain infrastructure for a multi-channel and multi-SKU (Stock Keeping Unit) operating environment. This involved building two logistics distribution centres in Shanghai and Wenzhou to meet the booming demand for the company’s products from consumers in the Yangtze River Delta economic zone. To optimise inventory levels and streamline its business operations, Semir adopted a Make-to-Order (MTO) production process which in turn required the support of an agile and flexible supply chain to help the company respond quickly to fluctuating market demand.

Prior to the implementation of Manhattan Associates’ solution, Semir’s warehousing and distribution operation was predominantly a manual one, however, it was plagued with inefficiency. Picking often resulted in repetitive effort and inaccuracies in inventory and orders were common. At the same time, Semir’s incumbent, functionally limited information system lacked the ability to collect and process data in a timely manner, thus resulting in long

response times as market needs changed. In terms of labour management, the incumbent system was unable to closely track and evaluate employee performance, let alone planning and scheduling workforce deployment. As

Semir’s business growth accelerated, the legacy system could no longer support its day-to-day warehouse operations or respond to the fast-changing nature of the market it was trying to serve.

With increasing orders from both its retail stores and online platform, Semir realised the importance of having high visibility and access to inventory to deliver a strong and consistent multichannel retail experience to customers. It became apparent to Semir that the missing part of the puzzle was a highly intelligent platform capable of managing the short lead times that exist within the apparel industry, the increasingly discerning nature of customers, and the complexity of SKUs in its warehouses.

Mr. Zhang Zhenlin, logistics director at Semir pointed out, “We were keen to adopt an advanced supply chain system that would enable us to meet the fast-changing needs of our customers and which would provide a solid foundation for sustainable business growth. We strongly believed that an investment in a marketleading supply chain technology platform that was proven in a multi-channel retail environment would be the key to helping us deliver on these objectives.”

## MANHATTAN WMS SELECTED TO ADDRESS SEMIR’S CHALLENGES

After a thorough selection exercise involving a number of rival offerings in the marketplace, Semir chose Manhattan Associates’ Warehouse Management solution for the management of its day-to-day operations in its Shanghai distribution centre (DC).

Manhattan Associates was chosen for its solid experience working with leading apparel companies locally and around the world and because of the strength, expertise and professionalism of its dedicated local team.

“Distribution in fashion—and particularly ‘fast fashion’—is a real challenge and your supply chain systems need to be equipped with specialised functionality that can help you effectively and accurately process the high volumes associated with it,”



explained Mr Zhang. “We appreciated Manhattan’s expertise in helping us handle order fulfilment faster and more efficiently, and its technology allows us to effectively handle our diverse and fast-changing SKU mix. That SKU mix is routinely made up of individual inventory items that are available in different colours, sizes, styles and quantities. The key for us is that Manhattan’s system allows us to track individual inventory items by all of those attributes.”

“We were also impressed with Manhattan’s implementation methodology, the highly flexible and configurable nature of its solutions and the ability of its technology to integrate smoothly with our existing Material Handling Equipment (MHE) which includes a sophisticated sorter (for outbound goods) in both the Shanghai and Wenzhou DCs plus an automated storage and retrieval system (AS/RS) in the Shanghai facility,” commented Mr. Zhang.

Other functionality within the Manhattan system that has made a real difference in the way Semir is now able to operate includes its ability to now replenish store orders with ‘distributions’ (or ‘Distros’), which basically means a Semir store can now receive ordered goods from the supplying DC much more quickly than in the past. Distros, which are essentially (item level) store orders sent from Semir’s host system to the Manhattan WMS, now allow Semir to fulfil an order by running a ‘bulk wave’ pick using inventory already in stock.

Mr. Zhang continued, “In the future, we have the option to crossdock inventory using Manhattan’s system which means we could transfer goods at the dock door from an inbound delivery vehicle to a store-bound delivery vehicle without the need for the goods to put away into storage within the DC. We could also at some future point adopt ‘flow-through allocation’ which would involve goods being delivered into the DC and directed to a ‘put-tostore’ holding area where goods destined for a specific retail store would be temporarily held until the store needs them.”



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### KEY BENEFITS DELIVERED

Manhattan’s Warehouse Management solution has already delivered measurable ROI and productivity gains in inventory management, labour management, physical space utilisation and overall warehouse efficiency. Going far beyond basic picking, packing and shipping, the Manhattan WMS uses advanced algorithms to mathematically organise and optimise warehouse operations and transform warehouse logistics into a critical strategic component in the supply chain.

Having deployed Manhattan’s technology in its Shanghai DC, the system was subsequently integrated with Semir’s SAP system the following year. Semir has already reaped a number of key benefits from its investment in the Manhattan technology.

The improvements seen so far include greater efficiency in all warehouse operations, better inventory accuracy, faster receiving and shipping processes, and better planning of workloads to manage peak periods.

#### Improved efficiency in warehouse management

Semir needed a centralised system to manage its 160 manufacturers and to make sure they adhere to Semir’s vendor compliance rules for the way the business needs to be serviced. With the ability to closely monitor vendor compliance, Manhattan’s solution has helped Semir streamline and standardise the way in which it interacts with its suppliers in terms of processes such as purchasing, receiving, inventory control and accounting.

In addition, by increasing inventory visibility and improving the whole order fulfilment process, Manhattan’s Warehouse Management solution has helped Semir to create an efficiently run multi-channel business operation which allows the company to respond quickly to changing demand patterns and ultimately optimise service levels for customers.



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#### **Higher accuracy in inventory management**

Manhattan’s WMS has also enhanced Semir’s inventory management by increasing stock accuracy, improving order fulfilment and reducing order cycle time. Within the Shanghai DC, picking efficiency has been significantly improved—by 60 percent. As a result, Manhattan has helped Semir improve space utilisation by 30 percent, which in turn, has enabled Semir to refine its warehouse layout for faster fulfilment and decreased overhead.

#### **Faster receiving and shipping processes**

Following the deployment of the Manhattan technology, Semir has successfully accelerated overall product throughput and is now able to process 350,000 individual pieces every seven hours.

#### **Better planning of workload for higher performance**

With its task management capabilities, the solution has helped Semir to better plan and balance workloads as well as monitor activities. Through collecting and analysing data from its daily operation, such as what workers are doing, how many locations they have visited, what inventory or equipment they have handled and paths they have travelled, Semir’s supply chain managers have a clearer picture of individual workers’ performance and are able to better forecast future staffing requirements. As a result of these capabilities, Manhattan has helped Semir save 40 percent in labour costs.

“With Manhattan’s solution, we now have a degree of agility in our supply chain that we could not have hoped to achieve previously,” Mr. Zhang commented. “Despite the increasingly complex and fast-moving nature of the fashion industry and the supply chain that supports it, Manhattan’s technology has provided us with a platform that allows us to be agile and enables us to provide a reliable and consistent service across the multiple channels that we operate.”

Building on the success of the deployment in Shanghai, Manhattan’s team is continuing to work closely with Semir as it embarks on the next phase of its Manhattan WMS roll-out at its DC in Wenzhou which, once completed, will enhance the supply chain it operates for the group’s Balabala brand.

“We are very satisfied with the current deployment in our Shanghai distribution centre, and we look forward to seeing more return on our supply chain IT investment in the near future,” Mr. Zhang concluded.