

#### **HAI** ROBOTICS

WINIT, a China-based cross-border e-commerce warehousing operator, added 100 HAI Robotics robots to their facility in the UK and improved their workflow efficiencies 3-4 times over their previously manual operations, compressed storage density by 60%, increased picking efficiency by 50%, and perfected their ontime order delivery to near 100%.

# WINIT's Challenge

WINIT is a Shanghai-based provider of full warehousing and logistical solutions for cross-border e-commerce that serves the United States, Australia, and several European countries. The total size of its warehouses around the world exceeds 399,000 square meters (over 4,300,000 square feet), or the size of 56 football pitches. In the UK alone, WINIT runs 3 warehouses with a total combined footprint reaching 550,000 square meters (over 164,000 square feet) or 7 football pitches.

The UK facility in Tamworth, Staffordshire, a town near Birmingham in the central UK, was confronted with expanding challenges as the demand for global warehousing services surged dramatically due to the growth of cross-border e-commerce businesses in the past two years. Statistics indicate that in 2021, Chinese cross-border trade volume amounted to ¥1.98 trillion yuan (around \$283.37 billion dollars), up 15% compared to the year before, and this volume is expected to reach ¥2.5 trillion yuan (around \$357.66 billion dollars) by 2025, according to figures released by China last year.



WINIT also needed to address the challenges of managing a vast number of SKUs which increased the need for warehouse storage density and orderpicking efficiency. To successfully address this, in 2021 WINIT turned to HAI ROBOTICS to automate its orderfulfillment center operations.

#### **Workflow Solutions**

HAI ROBOTICS, the industry leader and trailblazer of Autonomous Case-picking Robotic (ACR) systems, created and implemented an automated solution for WINIT that increased their storage density, automated material handling workflows for maximum efficiency, and improved storage volume.

100 robots were deployed in WINIT's Tamworth, UK warehouse. These tall autonomous robots driven by Al algorithms walk smoothly through the 10,000 square meters (around 108,000 square-foot) facility, bringing goods to workstations where operators pick and sort goods with maximum efficiency.

This solution not only included the deployment of 100 HAIPICK A42 robots, it contained 16 on-conveyor workstations for order picking that are ergonomically designed for operators to fulfill orders more accurately, with increased speed, and with lower effort.

Becky, a warehouse operator, said that with the help of the robots, she could stay in the workstation and just wait for the robots to pick and carry goods back and forth to her workstation. She no longer walks thousands of steps indoors to pick orders.

"Getting goods now is like getting something at my fingertips. [The robots] make my work much easier. Now I don't need to move around and bend my waist. Everything is easy."

This robotic solution allowed the facility to increase the average worker efficiency rates to 450 cases/h and increased the daily handling volume up to 50,000 pieces. The goods-handling efficiency rate for the warehouse was improved 3 to 4 times over the previously manual processes and the picking efficiency rate of operators fulfilling orders was increased by 50%.

Christopher, Outbound Team Leader, with over 12 years' experience stated, "With the robotic system we have zero mistakes at the moment, there are clear instructions for each action and when we pick wrong goods the system blocks it. And an easy-to-handle process is in place when something unusual happens. The system saves a lot of manual efforts."



# **Storage Density**

In addition to efficiency improvements, HAI ROBOTICS' ACR solution improved WINIT'S UK facility storage density by 60%, increasing the storage capacity to 120,000 storage locations. This allows the facility to effectively store and manage over 100,000 SKUs within the facility they already owned.

### Resilience

Since the HAI ROBOTICS' automated robotic solution has gone live, WINIT has seen a spike in its facility throughput and are able to successfully manage surging order-fulfillment requests driven by the online shopping boom over the last 2 years. With the help of HAI ROBOTICS, the overall service and operation of WINIT has not been significantly affected despite the disruptions to the global supply chain since the start of the COVID-19 pandemic.



In 2021 when the pandemic was still in full swing and online ordering was reaching unprecedented rates, this period demonstrated the critical value of flexible, automated warehousing solution that can be swiftly deployed. WINIT, who found no shortcuts to improve their facility workflows, found HAI ROBOTICS' solution to be the ideal fit to provide high storage density, superior goods-handling accuracy, operation efficiency that provides easy flexibility to adapt to changes in demand.

"These smart robots have well met our expectations," Bob, the Warehouse General Manager at WINIT's Tamworth facility said, "We picked HAI ROBOTICS as our autonomous robot supplier among several other companies because it is one of the first developers. Its system has better stability than that of others, and its staff is professional. So, we chose them."

# **Alleviating Labor Woes**

"The labor shortage in the UK is particularly apparent now. Brexit and the COVID-19 pandemic have had dire consequences for the warehouse and logistics sector. Experienced employees are leaving and it's hard to fill in new ones. As a result, our labor cost, surged too." Bob, WINIT's Warehouse General Manager, stated.

And, he's not alone. Almost all warehousing facilities are facing difficulties hiring and maintaining staff in a slow job market, and the average consumer expects faster, accurate deliveries when they order online. HAI ROBOTICS' automated robotic solution extended the capacity of each individual WINIT operator by increasing picking efficiency by 50% and improving workflow efficiencies by 3-4 times. And the robotic solution allowed the operators to work faster with less manual labor. These robotic solutions allow warehouse employees to focus on more valuable, complex, or strategic tasks as well as upskill.





As more productivity is seen from each individual staff member, HAI ROBOTICS' solutions offer the ability to realize significantly reduced labor costs and alleviate pain cause by a labor shortage.

Companies are realizing the high value of automation and robotics. Automation is already a significant industry, representing over \$10 billion in annual global spending. According to ABI Research, it's estimated that there'll be around 50,000 robotic warehouses by 2025 with over 4 million robot installations around the world.

#### HAI ROBOTICS

# Are you curious how advanced automated storage solutions may be able to accelerate your facility?

Contact HAI ROBOTICS to speak with an automation advisor about your facility's improvement goals and explore how autonomous case-handling robotic solutions may be able to advance your business.

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