

HYNES CUSTOM ROLL FORM SOLUTION RESULTS IN 30% TIME SAVINGS

for Global OEM of Robotic AS/AR Supply Chain Solutions



INTRODUCTION

In recent years, the global landscape of warehouse operations has undergone a transformative shift, with an unprecedented surge in the adoption of automated material handling solutions. In fact, according to a <u>recent report</u>, the market is expected to grow at a compound annual growth rate of around 12.4% between 2021 and 2026. As providers of these systems strive to meet the demands of a rapidly evolving market, it has become more critical than ever for them to find ways to optimize efficiency and performance.

A global original equipment manufacturer (OEM) specializing in robotic AS/AR (automated storage/automated retrieval) supply chain solutions was no stranger to this growth. It faced a significant challenge with the time- and labor-intensive installation of its automated material handling storage systems. This case study delves into the issues faced by the company and explores the custom solution provided by Hynes Industries, its strategic partner in custom automated material handling solutions.





THE CHALLENGE

For decades, this global OEM has been a prominent player in AS/AR supply chain solutions. Known for its warehouse operations expertise and warehouse automation technology, the company offers users an end-to-end automated warehouse platform designed to increase agility, control, and efficiency.

The global OEM encountered a major hurdle in the installation phase of its automated material handling storage systems. The previous installation method, which required installers to fasten parts together manually on the job site, was excessively time and labor intensive. With millions of components needing manual assembly for every installation, the process quickly became a bottleneck in project timelines.

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The project's sheer scale in managing thousands of stock-keeping units (SKUs) required meticulous attention to detail and complicated sourcing from hundreds of vendors for materials and components. These factors contributed to prolonged installation times. While the parts themselves were not outdated, the assembly process needed a reevaluation to align with the company's commitment to efficiency and innovation.





A CUSTOM SOLUTION

In pursuit of a solution, the global OEM turned to Hynes, a custom roll form fabricator of automated material handling components. Hynes demonstrated a deep understanding of the intricacies involved in designing, fabricating, assembling, and stocking key components used in AS/AR supply chain solutions, and proposed an innovative approach to address the labor-intensive installation process. Hynes utilized their deep expertise in collaborative engineering to work with the OEM's design team on new racking concepts and assemblies that would be custom-fabricated and pre-assembled. This would accomplish the duo's goal of supporting on-site installation.

Hynes leveraged its more than 200 years of engineering expertise in <u>custom roll form fabrication</u> to design several custom roll form components that would be fastened and assembled in-house, then shipped directly to the designated job site. The pre-assembled racks could then be seamlessly installed into the OEM's automated material handling storage systems. Each pre-assembled rack significantly reduced the number of manual assembly steps required on-site, **eliminating the labor cost** associated with hand-fastening dozens of parts together for thousands of units. Additionally, Hynes was able to help rationalize some component designs, reducing SKU count in the racking structure and further reducing the cost and complexity of the racking solution.

Engineered to install seamlessly into the global OEM's shelving system, the solution reduced installation time, decreased labor costs, and provided a repeatable install process to enhance overall system reliability.







THE RESULT

The implementation of Hynes' collaborative engineered solution with the OEM resulted in 30% time savings. The solution also reduced SKU counts, sourcing complexity, and the labor costs associated with a typical AS/RS racking solution.

Through strategic collaboration and innovative problem-solving, Hynes successfully addressed the labor-intensive installation challenge faced by the global OEM, enabling it to maintain its position as a leader in AS/AR supply chain solutions while achieving tangible efficiency gains.



NEW RACKING CONCEPTS

custom-fabricated and pre-assembled for the OEM.



CUSTOM ROLL FORM COMPONENTS

designed to meet the OEM's design and process needs.



ASSEMBLED IN-HOUSE

then shipped directly to the designated job site.





LET HYNES DO THE WORK FOR YOU

Automated material handling has undoubtedly emerged as a significant catalyst for reducing costs and labor in supply chains. The ongoing surge in e-commerce, challenges related to labor availability amid the COVID-19 and post-COVID-19 landscape, and a widespread consumer preference for on-demand and at-home deliveries have collectively driven notable growth in fostering a more agile and automated supply chain.

Whether you need basic slotted angles and channels for simple racking solutions or custom-engineered roll form parts for large-scale, fully automated robotic warehouses and fulfillment centers, we have the engineering capability and roll form expertise to meet your unique needs. Contact us to <u>request a quote</u> and get started on your custom solution.

REQUEST A QUOTE

