

HITACHI

Inspire the Next

Supply Chain Efficiency with SOLOCHAIN WMS

Hitachi, a cutting-edge

Global Manufacturer of Automotive Parts

Industry:
Automotive
Employees:
200 - 1000
Headquarters:
Santa Clara, CA



MEETING THE INDUSTRY'S MOST STRINGENT STANDARDS AND OPENING NEW CHANNELS

The manufacturer had to implement solutions in its Querétaro facility in Mexico to ensure compliance with a new client's stringent requirements.

To meet expectations, Hitachi needed the solution to be implemented rapidly. However, the Covid crisis prevented the implementation team from being deployed on site.

CHALLENGES

Generix implemented the SaaS version of SOLOCHAIN WMS/MES remotely.

Thanks to a two-phase implementation strategy, the Generix team was able to deliver the solution in record time, namely 15 weeks.

SOLUTIONS

SOLOCHAIN WMS/MES allowed Hitachi to implement warehouse management best practices in its Querétaro facility and to comply with its client's requirements, as well as automotive OEM industry standards.

RESULTS

The future belongs to the data-driven



Background

The Client

Hitachi Astemo Americas manufactures automotive materials, products, and systems for some of the most prestigious vehicle manufacturers in the world.

Hitachi's Querétaro business unit, assembles critical parts for brake systems and car suspensions, including brake calipers, hoses, fittings, wiring harnesses, discs, and pads. The facility is approximately 1 million sq. ft., employs 200 to 1000 workers, and operates 24 hours a day, 7 days a week.

Smart Manufacturing:

Hitachi is fully committed to Smart Manufacturing in its continuing efforts to achieve near-zero emissions, meet the highest safety standards, and adhere to the strictest quality and reliability standards.

To ensure the company's leadership in the pursuit of an Industry 4.0 vision, Hitachi has retained the services of 300+ experienced professionals worldwide dedicated to identifying solutions that will completely remove bottlenecks and containment issues. The consensus, tells Sudhanshu Gaur, Hitachi Astemo America vice-president and chief architect, is that these solutions must necessarily involve different layers of the Industrial Internet of Things (IIoT).

"We are standing at the cusp of a fourth industrial revolution driven by exponential growth in IT technologies," Gaur said. "There is a great opportunity for manufacturers to embrace these changes and unlock greater business value while bringing more flexibility and resiliency into their operations."



The Challenges

Hitachi Astemo had recently acquired a new client: a global, best-in-class original equipment manufacturer (OEM) interested in the brake and suspension parts assembled in the Querétaro facility. After performing an audit of Hitachi's facility, the client determined that its current systems would not be able to meet its requirements. The key challenges that Hitachi had to urgently address in its Querétaro facility were:

- Insufficient levels of inventory accuracy
- Non-existent FIFO inventory management capabilities
- Suboptimal picking efficiency and accuracy
- Inability to adequately trace components/perform recalls

In addition to these issues, Hitachi had to contend with the same resource shortages that have been plaguing most manufacturers and distributors around the world. The manufacturer had to find solutions to avoid costly production delays caused by shortages and improve its material requirements planning capabilities.

Hitachi Astemo launched a competitive RFP process to source a Warehouse Management System (WMS) that would help them overcome their current challenges.

At the end of the RFP process, Hitachi identified the SOLOCHAIN WMS/MES as the solution of choice for its Querétaro facility.



saves Hitachi the need to resort to expensive teams of external engineers and gives them the operational agility to adapt efficiently to new requirements.

Warehouse Management Best Practices Fueled by SOLOCHAIN WMS/MES

SOLOCHAIN WMS/MES provides Hitachi the data and the visibility into inventory and workflows needed to implement warehouse management best practices in its Querétaro facility.

With SOLOCHAIN, Hitachi can count on:

- **The Highest Levels of Inventory Accuracy:** From receiving to shipping, and throughout the entire manufacturing process, the system precisely indicates the location and state of every component, subassembly, and finished product in real time.
- **Increased Inventory Management Capabilities:** The system enforces FIFO inventory management for every item in stock, at every step, by instructing employees to pick the right items on their mobile devices.
- **Optimal Picking Strategies:** Real-time communication between SOLOCHAIN and the manufacturer's ERP system enables advanced picking methods and optimized pick paths. The system minimizes unproductive movements and drastically increases efficiency through enhanced task assignments.
- **Quality Assurance:** SOLOCHAIN WMS/MES enables forward and backward traceability for every part, subassembly and finished product across the whole supply chain. Having the ability to trace an item's entire journey, from vendor to customer, is essential in an industry where quality controls and certification requirements are so strict.
- **Compliance with Client Requirements:** The WMS/MES allows management team to customize order processing rules. Once defined, these rules guide workers on how to manage packaging, palletizing, labeling, shipping, etc., to meet the client's specific requirements. This greatly minimizes order fulfillment errors, which leads to much higher levels of customer satisfaction.
- **Omnichannel Distribution:** SOLOCHAIN is designed for efficient integration with customer facing applications and supplier systems to help Hitachi monitor and better manage its workflows and many channels well beyond the four walls of its facility.
- **Permission Setup:** The system's intuitive graphical Roles & Permission setup makes it easy for Hitachi's management to enforce system validations, eliminate user issues, and achieve higher levels of employee accountability.



Generix Delivers

Schedule

Time is of the essence: Hitachi could not afford any delays and had to quickly implement solutions to meet its new client's requirements. Leveraging SOLOCHAIN's modular design, the Generix team divided the implementation into two phases to ensure that key capabilities were delivered on time.

Phase 1: Implement SOLOCHAIN WMS/MES to support manufacturing processes in the brake department.

Phase 2: Deploy SOLOCHAIN in the suspension department and complete the WMS/MES integration with Hitachi's ERP system, client facing applications, and supplier systems.

Keys to Success

Thanks to Generix's experience and expertise, the implementation team was able to develop creative solutions for problems that had never been encountered before, and to achieve a fully remote implementation during the first phase. That creativity, paired with a well-iterated and clearly defined deployment process, enabled the Generix Team to guide Hitachi's engineers through the process and meet every deadline.

Hitachi's management also contributed to the operation's success by fully dedicating members of its technology team to the implementation. Hitachi's technology experts collaborated with the Generix team and leveraged SOLOCHAIN's easy-to-use implementation tools to navigate the implementation process with ease and agility.

**PHASE 1
WAS SUCCESSFULLY COMPLETED
in just 15 weeks, surpassing Hitachi's
and the client's expectations.**

**PHASE 2
WAS
SUCCESSFULLY
COMPLETED**





Results

Meeting the Industry's Most Stringent Standards and Opening Up New Channels

SOLOCHAIN WMS/MES allowed Hitachi to implement warehouse management best practices in its Querétaro facility and to comply with its client's requirements as well as automotive OEM industry standards.

To meet the client's quality assurance standards, Hitachi was required to enforce FIFO inventory management. With SOLOCHAIN WMS/MES, FIFO is now applied without fail at every step and for every item in stock: components, subassemblies, and finished goods.

Meanwhile, SOLOCHAIN's powerful tracking capabilities have replaced error-prone spreadsheets. This ensures the manufacturer can perform efficient and targeted recalls the minute an item is identified as problematic.

Compliance with its client's and the industry's strictest quality standards has opened up new possibilities for Hitachi. Thanks to SOLOCHAIN WMS/MES, the manufacturer can now explore new markets and extend its reach in the high-end automotive OEM sector.

Accurate and Detailed Inventory Visibility - Improved Throughput: Significantly Faster Manufacturing Process

Being able to rely on accurate inventory data enables

Hitachi to stay ahead of demand and avoid frustrating shortages. SOLOCHAIN helps the manufacturer ensure sufficient quantities are always maintained as safety stock, for instance, which provides an additional a further guarantee to clients who might be concerned about product availability.

Optimized Item Locations and Accurate Picking Activities Made for a Better Work Environment

Optimized item location and efficient task assignments mean that goods are being moved more efficiently across the facility. This, in turn, prevents frustrations on the floor and encourages employees to handle items with more care, which leads to a tidier warehouse and a better work environment.

A Better Customer Experience

Shipping activities no longer rely on spreadsheets at the Querétaro facility. SOLOCHAIN WMS/MES now helps management plan and organize shipments to avoid bottlenecks at the dock and guarantee that every order is shipped on time.

Through its integration with customer - facing applications, SOLOCHAIN provides information on the location and status of ordered items, helping clients track their order's progress.

About Generix Group



Since 1997, Generix Group North America has been developing and implementing best-in-class supply chain optimization systems that enable warehouse and distribution center operators to achieve business resiliency.

SOLOCHAIN is a world-class Warehouse Management System (WMS) and Manufacturing Execution System (MES), with implementation sites spanning the globe. This solution allows manufacturing as well as logistics companies to optimize their operations across the supply chain. SOLOCHAIN is a web-based application that provides a scalable and easily adaptable platform, integrating the latest technologies.

Fast, intuitive user interfaces translate into better control, increased mobility and a more productive workforce.

At Generix Group, we are committed to providing the best solutions for supply chain and materials management. We believe in innovation, knowledge, leadership and integrity. Our people are industry and solutions experts. Driven and dedicated management professionals lead a team of software and logistics engineers with the focus on one mission: provide the best material management solution that creates real, tangible benefits and translate into increased value for your company.

To learn more: www.generixgroup.com

