

Total Inventory & Material Management Suite of Software

Hayes Optimizes Manufacturing Assembly To Find Almost Any Part In Less Than 20 Seconds

As Hayes Manufacturing grew from a job shop to a high volume coupling supplier to the automotive and heavy equipment industry, its 26,000 square foot facility began to get crowded and less organized. Hayes realized the need for software that would help them keep track of their parts and inventory better. The Fife Lake, Michigan Company decided to implement FastPic[™] Inventory Management Software to maximize its inventory and parts storage area by increasing storage density and operating productivity.

"Space was at a premium," says Hayes Manufacturing Vice President, Jim Hayes. "Half of the 40 by 80 ft room was filled with 4 by 8 ft standard shelving. We would have areas with 50 items and others with only one, which means that the center of the shelf behind that one item was dead. As the business was growing and our volumes picked up, we needed more assembly space. The room was ideal for assembly, but we were storing all this product in it," says Hayes.

Hayes was spending too much time on locating parts manually. "Competition for table space increased with size and volume of orders. It was getting to be a real problem. When a hot job came in, for example, we would have to stop work on a less urgent project, clear the parts, put them away, complete the new job and then set up again for the original project. This was time-consuming and costly and was happening more and more often."

In addition to implementing FastPic software, Hayes installed an automated storage and retrieval system. The Shuttle™ Vertical Lift Module (VLM) by Remstar International (Westbrook, ME) was integrated with the software to maximize efficiencies. When retrieving parts, the software knows which tray on the Shuttle VLM that the part is located, and presents it to the pick window, at the ergonomically positioned "Golden Zone," at waist high.



Site

Hayes Manufacturing, Fife Lake MI

Application

Point of use automotive parts manufacturing

Software

FastPic Inventory Management Software

Integrated Automation Three Shuttle VLMs

Summary

Hayes expands internally with FastPic Inventory Management Software and Remstar's Shuttle[™] VLM to eliminate walk & search time & triple manufacturing space Assembly at Hayes starts with a bill of materials listing the components required for each product assembly. The system can either pull a single type of product or a kit that includes all parts needed for a particular assembly.

An operator enters the quantity of items to be retrieved into the system's computer terminal. The VLM moves to a tray location, removes the 6 ft by 32 in. galvanized tray holding the product and delivers it within seconds to the pick window.

The window is ergonomically positioned so that the tray arrives waist-high, making access easier. The operator simply removes the needed parts and carries them to an adjacent assembly area, or places the items onto wheeled carts. Primary assembly is completed on rows of tables. Once completed, finished product moves to a packing area that features a long table with a conveyor that runs down the middle. Workers on both sides of the conveyor pack components into cartons delivered earlier by a separate conveyor from the corrugated storage area.

Completed cartons are sealed and hand stacked onto waiting pallets. Full loads are then taken by lift truck to thereceiving/shipping dock or to the reserve storage pallet racks until ready for shipment to customers. The company produces about 45,000 assemblies/yr.

Much of the smaller receipts that are housed in the VLM arrive by parcel carrier, and must be opened and hand-counted or weight-counted before entering the system. These include thousands of small parts such as nuts, bolts, 0-rings, bushings, and hubs, as well as larger items that weigh up to 20 lb each.



FastPic Inventory Management Software can either pull a single type of product or a kit that includes all parts needed for a particular assembly with a push of a button.

Since adding the VLM storage system, Hayes Manufacturing now has the necessary room and flexibility in the assembly areas to take on priority projects. The system also gives Hayes greater control and more accuracy in pulling component parts for these operations.

"Our efficiency is much greater," says Hayes. "You don't even need to know what the part looks like. You just punch in the number and it brings it to you, then it tells you where the part is on the tray. Anybody can pull it."

"We now have enough space and inventory management to handle three to four hot jobs, without having to break down an existing order. We've also improved access to parts, which now is able to find just about any part in less than 20 seconds and have eliminated manual inventory time. We just print out the report of the inventory and we're done," said Hayes.



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