

BENCHMARK



BENCHMARK BRIEFINGS

SITE

Weil-McLain,
Michigan City, IN

APPLICATION

Parts distribution for
plumbing and heating
wholesalers

EQUIPMENT

Horizontal carousel system
(three carousel worksta-
tion), FastPic software, Pick-
Light Towers, scissor lift

SUMMARY

System increases
efficiencies while
increasing customer
satisfaction



“The number of orders we process per man-hour has more than doubled, we can ship upwards of 98% of our orders within 24 hours.”

“We have increased the number of SKU’s stored in our repair department from 400 to over 1200.”

Weil-McLain is the leading designer, manufacturer and marketer of cast iron boilers for space heating in residential, commercial and institutional buildings in the United States and Canada. Yet, just a short while ago, the company was relying on a storage system in its repair parts department that, frankly, was leaving them cold.

The company’s old storage system utilized manual picking from various storage bins - a typically inefficient pick, pack and ship system. Unfortunately, the inefficiency of the system limited Weil-McLain’s ability to respond to their customers’ needs in a timely fashion and, consequently, a substantial order backlog was created. In addition, the building’s space limitations and layout complications hampered the system; only about 400 SKUs could be maintained in the department’s static shelving and occupied 4,000 square feet.

“The shortcomings of the old system were obvious,” said Ken Niemi, vice president of marketing for Weil-McLain. “We were utilizing a manual picking method that required double handling through a packing system before we shipped the parts out.

Plus, most of the stored parts were not tied to any computer system. “What’s worse, there was no system for locating parts, so we relied pretty much on the operator’s experience to know where the parts were. And we only had a few operators who were sufficiently familiar with the parts to consistently pick them accurately.”

Considering the change in customer ordering patterns (an increase of 22% and 15% in orders in two years), in addition to new products being introduced and the growing obsolescence of their storage system became more troubling each day.

This was not the kind of situation befitting an industry leader like Weil-McLain. Founded in 1881 as a small plumbing and heating house in Chicago under the name Weil Brothers, the company, a division of United Dominion Industries now based in Michigan City, Indiana, has been able to maintain high profit margins in a slow-growth industry by providing superior value to its customers. The company sells its products primarily through a well-established distribution system of plumbing and heating whole-

salers, the majority of them in the northeast quadrant of the United States. Of course, unless the company could get its high-quality repair parts out to its distributors in a timely fashion, the entire operation would suffer. “Picking orders is one of the most critical elements of our daily business,” said Don Christensen, Weil-McLain’s Director of Physical Distribution. “Because we have so many boilers and so many different models of boilers, the chances of every distributor having every part of every boiler that they need - when they need it - are pretty slim. That puts a tremendous burden on our parts center to operate as efficiently and quickly as possible.”

Weil-McLain has done just that, substantially improving its order picking capabilities by virtue of a comprehensive new storage system from Remstar, a leading manufacturer and supplier of automated storage and retrieval solutions. In fact, the company’s use of the Remstar system has translated to a number of dramatic, quantifiable benefits, according to Christensen. “We have increased the number of SKU’s stored in our repair department from 400 to over 1200.”

www.Remstar.com

“Relying on operator’s experience to know where the parts were wasn’t conducive to rapid growth, increased SKU counts, and increasing customer satisfaction.”

“Plus, using FastPic inventory management software, we know exactly what we have and where it is.”

“The number of orders we process per man-hour has more than doubled, as has the weight shipped per man-hour. This means that we can ship upwards of 98% of our orders within 24 hours of receipt. That keeps our distributors very happy,” Christensen said.

Ultimately, this means that the distributors’ customers (heating/plumbing contractors, installers and oil dealers) are very happy. “We are in the business of manufacturing boilers to keep people’s homes warm, with the company focused primarily on the replacement side of the business,” said Niemi.



“We have virtually eliminated our order backlog, which sometimes was as long as three to five days.”

Recognizing the importance of improving delivery times - as well as the accuracy of order picking and the need to optimize limited cubic space - Weil-McLain knew that a major change had to take place. The company had two choices: put pressure on their entire distributor network to pick up their pace, which was impractical, or figure out a way to get parts out of their own facility more

quickly. The conclusion: a new storage system, and fast.

“What we were primarily looking for was a turnkey operation: carousels, conveyors, the lift tables, management software, etc.,” he said. “We wanted someone to come in and sit down with us, design the whole operation, install it, and turn it over to us.”

After a thorough review of their needs, Weil-McLain installed three Remstar horizontal carousels in the repair parts division, two with 22 carriers and one with 20. The carriers - each of which contains 12 shelves - are 12 feet high, 24.5 inches wide, and 18 inches deep. The carousel carriers each offer a 1000-pound capacity. The company also purchased both Pick Light Towers and put-to-light order batch lights, the FastPic software for control of the carousels and the manual storage racks.

The Remstar system is used to process repair parts orders for shipment. Customer orders are entered into the order processing system. Throughout the day, repair orders are retrieved from the AS/400 system and downloaded to FastPic, which are printed in the repair department. This process takes place automatically when orders are placed.

The system incorporates three stations - Induct, Picking/Packing, and Closeout.

Induct Station - Here cartons are set up based on the components ordered. The operator attaches a license plate to the carton for order control and processing, after which the order is assigned to a picking batch. Weil-McLain is equipped to process eight orders at one time in a batch, depending on the size of the cartons required. These batches are set up on a conveyor system that will accumulate up to four batches in front of the picking system.

Picking/Packaging Station - The operator calls in the batch from the conveyors on to the worktable, then updates FastPic software with the batch number to be picked. The software directs the carousels to the appropriate location and the operator is directed via the light towers to pick the parts and place them in the appropriate carton. When picking is complete, the operator releases the batch, which is transported via power conveyor to the closeout station. The reporting features within the FastPic software allow the AS/400 system to be updated with orders as they are completed.

Closeout Station - At the closeout station, the license plates are scanned to print the shipping labels and packing lists. The boxes are closed, sealed, and the labels are attached. The orders are then processed through the appropriate shipping method specified (RPS, UPS, etc.).



“We pack right on the carousel, so we’ve also eliminated the double handling of orders.”

According to Christensen, the success of the new system is evidenced by the fact that the company installed three additional carousels to support their assembly lines, as well as finished goods that accompany larger commercial orders. “Our people have really taken to the new system,” said Christensen.

“Besides doubling the number of orders and poundage that we process on a man-hour basis, we have virtually eliminated our order backlog, which sometimes was as long as three to five days,” said Niemi. Today if an order is in here before noon, it normally ships the same day. We pack right on the carousel, so we’ve also eliminated the double handling of orders.”

While the company has no hard statistics to measure the decrease in picking errors, there has been a marked reduction in complaints received from customers as well as the number of returned parts. As Christensen points out, “In our business, no news is usually good news.”

The productivity, accuracy and efficiency of Weil-McLain’s Remstar system is summed up in this assessment by Christensen: “If we store it correctly, we pick it correctly. It’s as simple as that.” And that’s a statement that helps this boiler maker put some serious heat on the competition.



REMSTAR
Remstar International Inc.
41 Eisenhower Drive, Westbrook, ME 04092
800-639-5805
www.Remstar.com info@remstar.com