



Great Plains Manufacturing Selects Pangborn for Company-Wide Initiative to Optimize Assembly Process

They needed to overcome the rigorous, time-intensive cleaning, descaling, and preparation of product steel components before painting and assembly.

Challenge

Great Plains Manufacturing is one of the foremost manufacturers of agricultural implements in the U.S., as well as a leading producer of dirt working, turf maintenance, material handling, and landscaping equipment in North America. The demand for its products is high, and they have an extensive range of steel products. Senior leaders at Great Plains recognized that its product assembly process could be more efficient, which would increase speed-to-market and result in additional value to its customers, dealers, and the bottom line.

To optimize the assembly process, one of the obstacles they needed to overcome was the rigorous, time-intensive cleaning, descaling, and preparation of the steel components of its products before painting and assembly. A cross-functional team of Great Plains' engineers, supervisors, and management personnel were tasked with researching and identifying potential partners and solutions to address these challenges in its assembly process. The solution selected would be installed in two of its plants.

Solution

This was a company-wide initiative for Great Plains, and the selection committee spent approximately eighteen (18) months conducting research. Key decision criteria influencing Great Plains' selection process were production rate, line speed, maintenance/operating costs, and the service and support they could expect to receive – including readily available parts. The Great Plains team visited several of Pangborn's customers. They were impressed by Pangborn's high-performing equipment, the total cost of ownership, and the fact that Pangborn machines have a reputation of being easy to maintain and operate, are safe, reliable, and durable.

Pangborn's sales and engineering teams conducted a thorough audit of Great Plains' facilities, ensuring that they understood the customer's current needs, as well as its future requirements. This was especially important because Great Plains was expanding its product line and its customers were requesting that any future equipment maintain or enhance the company's high-quality paint finish which is resistant to weathering and corrosion typically found on materials, machines, and equipment being used outdoors. After evaluating the data and insights gained during the audit, Pangborn was confident that its Vertical Descaling Machine (Model ES-1848) could be easily integrated into Great Plains' existing production lines, would improve its current assembly process, and it would address the long-term goal to proactively manage this process in the future.

Pangborn's Vertical Descaling Machine would provide Great Plains with faster production time and maximum blast coverage for a continuous flow of work pieces. Designed for maximum flexibility, the ES-1848 would easily accommodate the extensive range of Great Plains' steel products. The ES-1848 would also give Great Plains the proper surface for a high-quality paint finish and result in the clean, rust- and scale-free surface that is a fundamental requirement for anti-corrosion and weathering.

Pangborn's ES-1848 was installed in its largest tillage plant located in Ellsworth, Kansas, in the first quarter of 2019. The second ES-1848 was installed during the fall of 2019 in Abilene, Kansas. The implementation process went as planned with minimal disruption to the manufacturing processes.

Benefits

The capital expenditure required for this project is significant. Pangborn's Vertical Descaling Systems are already providing Great Plains with a cost-effective means of reducing its overall manufacturing expenses while improving the quality of its work. Additional benefits include:

- improving Great Plains time-to-market;
- a clean and safe process that meets current production needs and allows for future growth;
- the clean surface required for a high-quality paint finish; and,
- extending the life of Great Plains products.

About Pangborn

Pangborn is dedicated to providing superior shot blasting equipment and surface preparation solutions to thousands of customers across a variety of industries. The diversity and flexibility of our solutions enables us to serve customers who are looking for comprehensive turn-key solutions, as well as those who have very specific, a la carte needs. Working closely with each customer, our sales, engineering, and service teams design best-in-class solutions that help our customers drive operational excellence and realize improved total cost of ownership and increased profitability. We are more than just another supplier; we are a trusted partner and brand. With offices and support personnel located across the globe, we bring 146 years of experience and expertise to key markets and customers worldwide.

