Liquid Application
Case Study – Agriculture Industry

Peck Manufacturing Company (Herman, NE)
Finishing Finesse

After teaming up with Nordson’s liquid painting experts, this agricultural equipment manufacturer from America’s heartland improved production efficiency and enhanced finish quality.

Peck Manufacturing Company (Herman, NE) has reliably served the farming industry since 1969, supplying a wide variety of portable grain augers to farmers of all sizes. A small, family-owned operation, the company prides itself on quality, manufacturing augers with heavier components and modular repair capability that offer longer service life to their customers.

“Quality comes from strength, reliability and weight,” explains Travis Lynn, production engineer for Peck Manufacturing Company. “But it also comes from the way a finished product looks and performs over time. When I arrived at Peck in 2012, we were having major issues with the degradation of our paint coating. It was time to look at a different way of doing things.”

A Smaller Operation with Big Paint Concerns

Peck Manufacturing Company averages about 700 augers per year currently, with goals to surpass 1,000 annually over the next two years. The company offers a variety of models, ranging from a 31’ short auger to a larger 92’ version. Each auger begins with the manufacture of its parts, which are formed, welded and painted in-house. The company employs about 25 people, with a three-man painting team to manage a constant flow of parts through the paint booths.

According to Lynn, the company was using a very rudimentary paint system, incorporating components that really didn’t mesh well together. “We’d been using an old gun and a dip tank to get everything painted, with a hodge podge of hoses and a heater, without any sort of pre-spray surface preparation,” says Lynn. “Historically, I think the company went with the most economical solution, but it was the source of our paint degradation problems.”

For a better solution, and based on the experience of Walter Jay, the company’s general manager, Peck Manufacturing Company turned to Nordson Corporation – a leader in the design and manufacture of liquid painting equipment for nearly 60 years – and Industrial Paint Solutions, a Nordson distributor. Together, the team designed a system that is helping the company paint smarter and faster, while keeping them well-positioned as they plan for growth in the future.

Walter Jay, general manager (left) and Travis Lynn, production engineer, Peck Manufacturing Company, worked with Nordson and IPS to find a liquid painting solution that would help the company paint smarter and faster.
Electrostatics and Expertise – The Perfect Painting Solution

Peck Manufacturing Company’s new manual liquid painting system consists of a Nordson Kinetix® air assisted airless electrostatic spray gun and PermaFlo® pump. The Kinetix gun is designed to optimize the key mechanics of spraying, combining electrostatic power, air energy, fluid pressure and dynamic motion. The result is superior material transfer efficiency and consistent quality from part to part. The gun’s ergonomic design also provides operator comfort and reduced fatigue in manual painting applications.

Nordson PermaFlo Series pumps are designed and constructed to withstand the rigors of pumping today’s more abrasive, higher solids coatings. The modular design, wear-resistant coating and other proven features meet the right pressure and volume requirements for the application at Peck Manufacturing Company, and assure long service life and low maintenance costs.

Introducing electrostatic technology was only one key factor in improving the painting system at Peck Manufacturing Company. Another important change included adjustments to the way in which the old system had the delivery hoses, valves and filters configured.

“We were running things just about as inefficiently as could be, which is one of the main reasons we were getting a large amount of overspray,” explains Lynn. “Nordson came in and evaluated our entire system – how fluid lines were routed, where bypass valves were placed, how all our components were configured.

“Without Nordson’s help in undoing the years of missteps, we would have been shooting ourselves in the foot again – even with our really nice new electrostatic system. We were so impressed with the wealth of overall painting knowledge they brought to the table.”

Reaping the Benefits...Now and in the Future

Peck Manufacturing Company has been using its new manual painting system since October 2013 with positive results. The most noticeable benefit is in finish quality and finish durability. With the Kinetix electrostatic gun, a thinner layer of paint can be applied to the part. Lynn says that the paint dries more consistently and looks better. Additionally, the increased tint load now used, although more expensive on a gallon-by-gallon basis, has had a negligible effect on the unit cost of items, while significantly improving the product’s final appearance.

“All our parts look so much nicer and the paint holds up a lot better,” notes Lynn. “Before, our augers could fade within six months of sun exposure, and surface defects were frequently visible as the paint dried. We’ve already seen a marked improvement in finish durability.”

In addition, Lynn notes the overall improvement in production output. The paint consumption per part has been reduced, allowing them to save paint costs on each component. With the new system, Peck Manufacturing Company has also shifted to storage in 5-gallon pails instead of 55-gallon containers. This is helping to maintain consistent paint viscosity and quality.

“We are more efficient in so many ways,” says Lynn. “Our painting team is really getting their heads around the change in technique required for the new electrostatic system. They’re learning that they are able to apply a thinner coat, and they can paint at a faster production rate.”
As Peck Manufacturing Company prepares for growth in volume and territory, they are also planning to expand their paint color options for customers. Currently, the company paints in red. Future plans include expanding the product line into green and blue, providing more flexibility for farmers who want to maintain color consistency among all their equipment.

“We look forward to having Nordson and Industrial Paint Supply as partners well into the future,” Lynn concludes. “Their all around wealth of knowledge is invaluable and we know that they will be there for us whenever we need a little counsel, or if we need to expand. They haven’t let us down yet.”

For more information on the Kinetix electrostatic spray gun or other liquid painting technology from Nordson, visit www.nordson.com/liquid or contact the company at 800.433.9319. To learn more about grain augers from Peck Manufacturing Company, visit www.peckmfgonline.com or call 402.456.7314.