

IMPLEMENTING AN AUTOMATED SMART CONVEYOR LIQUID COATING SYSTEM

CASE STUDY ON DEGEEST CORPORATION, TEA, SD

FROM RICHARDS-WILCOX CUSTOMER TO LESTAUSA

What happens when collaboration is done right.



THE SITUATION

In 2018, DeGeest Corporation, a contract job shop for steel components since 1976, was expanding and wanting to build an automated liquid finishing system that would help them keep up with growing production demands. As DeGeest worked to automate finishing in its facility, the company discovered a solution to their high part mix with Lesta in Italy, makers of self-learning finishing robots.



THE CHALLENGE

The introduction of Lesta self-learning finishing robots to the finishing system started a new challenge in that robotic automation was now possible for high part mix general industry manufacturers. And this first robotic finishing system in North America would need to be capable of automatically shot blasting, washing, drying, painting and curing parts up to 1,500 lbs. that are a maximum size of 4' W. x 9' L x 9'-6" H. The part conveyor carriers would need to communicate with the robotic finishing equipment through the entire system. Something that had not been done before.

With over 10 different companies involved from conveyor to wash to controls, many ideas, concept layouts and revisions were presented. While each company knew their role very well, it led to a system with limited capabilities that couldn't function as required by the new level of automation in the system.

THE SOLUTION

The automated finishing system at DeGeest features a conveyor controlled with a “SMARTEYE” industrial metal bar code reader system tough enough to withstand a 12-wheel automatic shot blasting machine and that interfaces with the LestaUSA custom Production Manager Software System.

The shot blast profile recipe, dry time, paint color and paint program, flash and cure times are all tracked and communicated with the conveyor controls after the parts are loaded at the start of system. The end result has maximized throughput while greatly reducing finishing time and costs.



“We learned a lot about finishing automation as we integrated our system for DeGeest Corporation and started LestaUSA to bring these finishing solutions to other general industry manufacturers,” said Derek DeGeest, President of DeGeest Corporation and LestaUSA.

DeGeest soon became the exclusive North American manufacturer, distributor, and integrator of this self-learning finishing robot technology under the name LestaUSA.

“Of all the companies working on our system, one – **Richards-Wilcox Conveyor** – really impressed us with the same solution-oriented mindset we have.”

“Instead of saying no, they listened and found a way to deliver exactly what we wanted and needed,” added DeGeest.



THE OUTCOME

The upfront collaboration between DeGeest and Richards-Wilcox showcases what can be accomplished through teamwork.

“Richards-Wilcox has since become an important equipment partner for us,” stated DeGeest, “We essentially went from a customer of theirs to becoming partners. Now, we’ve taken what we learned through our own experience, and can deliver it to other manufacturers.”



Today, customers no longer have to worry about whether a substantial investment in finishing automation will pay off.

Through this partnership, all systems are tested and integrated before they arrive on the manufacturing floor.

Investing in a LestaUSA system comes with the peace of mind of knowing a solution-oriented company like **Richards-Wilcox Conveyor** is involved to ensure everything is working Day One.



ENGINEERED FOR EVOLUTION