

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 needed to increase capacity due to growth, while also enabling quick changeover due to the high color mix of product runs necessary to serve their customer base.

THE CHALLENGE

To meet the increased demand and complexity of an ever-changing array of product mix, robotics needed to be integrated into the system. The incorporation of robotics with multifunctional modalities, for components weighing up to 1,500 lbs. and maintaining a 4' W. x 9' L x 9'-6" H footprint was a challenge that had never been achieved in North America... yet!

THE SOLUTION

Leaders in their respective fields, DeGeest, Lesta and Richards-Wilcox Conveyor joined together to solve the problem. Collaborate, design, validate, and improve iteratively until a single system was created that would shot blast, wash, dry, paint and cure parts, weighing 1,500 lbs. in a 4' W. x 9' L x 9'-6" H footprint. The automated finishing system at DeGeest featured a conveyor controlled by 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 programs, flash and cure times are all tracked and communicated with the conveyor controls after the parts are loaded at the start of system. The result was a system that could switch seamlessly between 12 paint colors without downtime and an approximate increase of 50% capacity daily.





"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, distributer, 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 Conveyor showcases what can be accomplished through teamwork.

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"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 validated 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.



