

## AUTOMATION TRANSFORMATION AT LINKED MANUFACTURING SOLUTIONS

**ABOUT LINKED MFG SOLUTIONS U.S.A.** Linked Manufacturing Solutions is a three-year-old company located in the small, rural town of Minco, Oklahoma. Linked Manufacturing's work includes polyethylene bag sealing and packaging, bar coding, and product inspection. Its pick and pack services include kitting, repackaging, bundle wrapping, private labeling, bagging, heat sealing and wrapping. The company, with about 20 employees, warehouses its clients' products. It then packages and ships the products as required.

**THE CHALLENGE.** One of Linked Manufacturing's most prominent products is rubber and vinyl tubing used for weather stripping. The product is shipped in various dimensions to box hardware stores. It arrives to the factory on large spools and needs to be cut to specific lengths before packaging. Workers were performing this task manually, which was very repetitive and labor intensive. Owner Marty Dixon knew there had to be a better, more efficient way. For advice he turned to Mike Raymond, a manufacturing extension agent with the Oklahoma Manufacturing Alliance, a partner in the NIST-MEP national network. Raymond had worked with Dixon on several products and built a trusted relationship.

**MEP CENTER'S ROLE.** Raymond met with Dixon, discussing how the process lent itself to some kind of automation. Raymond then worked with Ben Alexander, an applications engineer for the Oklahoma Manufacturing Alliance. The two designed and built a proprietary device they dubbed "The Whirlygig," a machine capable of quickly winding 10 to 20 feet of product at one time. It is much faster and more efficient. Because it winds cleaner, the product more easily fits in the packaging. Building on that success, a second machine was developed with a capability to wind much longer stretches of material. A team from the Manufacturing Alliance is currently working on the plant layout for a new building in Minco, which will have improved efficiency flow and visibility. Dixon's goal is to expand the current 11 work stations to 16. While expansion is an exciting prospect, it's the changes in design to the new plant that Dixon most looks forward to. "Applying the Lean Manufacturing philosophies to a building built from scratch is one that will bring many advantages to our process layout. To get better and keep improving, you must continually look forward. If you're not changing and striving to always improve, you're dying."

"The process advancements we've made wouldn't have been possible without the help of the Oklahoma Manufacturing Alliance. Their mission to help small businesses is an important role and one that only those in the trenches of a startup or expansion of an established business can fully appreciate."

-Marty Dixon, Owner

## RESULTS



New automated process



\$250,000 in new sales



\$1.5 million in retained sales



10 new high-wage jobs



\$100,000 in annual cost saving

## CONTACT US



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