

## COVENTRY INDUSTRIES: USING AUTOMATION TO EXPAND CAPABILITIES

**ABOUT COVENTRY INDUSTRIES LLC.** Coventry Industries is a diverse company catering to three specific industries: car audio with their Coventry Car Audio division, retail tactical gear with the Coventry Tactical division, and ammunition machines/presses with Coventry Industries. Coventry Industries offers engineered manufacturing solutions and ammunition equipment, focusing on engineering, fabricating, metal forming, custom machining, manufacturing feasibility and reverse engineering. Coventry Industries operates out of their Holly, Michigan, facility with 24 employees.

**THE CHALLENGE.** Coventry Industries had been working on a side capability project making optic plates for the firearms industry. This was a product that brought in good business, with an opportunity for future growth. However, Coventry didn't have any space or individual to machine this part due to their busy workload with other core products and services. With manufacturing shifting towards technology solutions, they wanted to investigate adopting automation to machine this part during the off shift.

**MEP CENTER'S ROLE.** To explore their automation options, Coventry reached out to the Michigan Manufacturing Technology Center (The Center), part of the Michigan MEP and the MEP National Network™, for a technology opportunity assessment. After The Center's expert took a deeper look into what Coventry wanted to accomplish, the assessment showed the company would benefit from implementing a collaborative robot (cobot) for machine tending. This would allow Coventry the ability to do "lights out" CNC manufacturing for their optic plates.

The Center worked with Coventry in a two-phase project to mentor and support the cobot implementation. With The Center's help, Coventry purchased their own cobot that was integrated with their CNC machine. Three CNC operators learned how to program the cobot and set it up to run different parts. This created the capability for the cobot to run day and night. Within a few days, the cobot was implemented into production. While The Center was onsite, the operator being trained was so excited he chose to work through lunch to keep learning. Those trained discovered how simple a cobot is to program. Within a few hours they were able to program the robot to run different parts and could operate it with ease.

"The implementation of the cobot has been a huge success for Coventry Industries. We had our first 'lights out' run of the cobot, which added an additional 14 hours of production to the day. We will continue to look at implementing new technology at the company to facilitate growth and increase our capacity."

-Mike Coventry, President

## RESULTS



300% increase in production



\$40,165 in new investment



\$30,000 in new sales



\$25,000 in retained sales

## CONTACT US



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