

HARNESSING COBOT TECHNOLOGY TO ENHANCE WORKFORCE EFFICIENCY AND COMPETITIVENESS

ABOUT POLY-TECH PLASTIC MOLDING, INC. Poly-Tech Plastic Molding, Inc., established in May 1984, is a custom injection molder and extruder in the plastics and rubber products industry. The company's 62,000-square-foot, climate-controlled facility houses an ISO 9000/9001 compliant quality system, which ensures consistency and quality across their wide range of offerings. Poly-Tech serves diverse industries, particularly HVAC, where they produce concentric vent kits and sidewall vent kits, all made with high-quality materials and backed by a 100% guarantee. Poly-Tech's capabilities extend to extrusion services, manufacturing OEM replacement bushings, CNC machining, tool and die services, and mold-making. With a highly skilled workforce of approximately 75 associates, the company delivers precision-engineered products and services across North America.

THE CHALLENGE. Poly-Tech Plastic Molding, Inc. faced challenges with workforce retention, operational efficiency, and the ability to adapt to increasing demands in the plastics manufacturing industry. To remain competitive, the company recognized the need for advanced technology that could support growth, streamline repetitive tasks, and enhance production quality. For help, Poly-Tech turned to Arkansas Manufacturing Solutions, part of the MEP National Network™.

MEP CENTER'S ROLE. As part of the solution recommended by Arkansas Manufacturing Solutions, Poly-Tech invested in a collaborative robot (cobot). This technology promised to increase flexibility, improve safety by distancing workers on repetitive tasks, and provide the ability to adapt quickly and competitively to new customer demands. However, to fully leverage the cobot, employees required comprehensive training on programming, quality checks, and routine maintenance.

To address these needs, Poly-Tech Plastic Molding, Inc., and Arkansas Manufacturing Solution implemented specialized workforce training to optimize the cobot's functionality. The training program focused on ensuring employees could confidently program, operate, and maintain the cobot within their work cell. By equipping their workforce with these skills, Poly-Tech aimed to enhance productivity, maintain their high standards of quality, and provide innovative solutions for their customers.

The implementation of the cobot and employee training ensured that Poly-Tech maintained its reputation for excellent service, precision craftsmanship, and the ability to meet diverse customer needs.

RESULTS



90 jobs created or retained



\$225,000 in new investment



\$196,450 in cost savings

CONTACT US



1 Commerce Way
Suite 601
Little Rock, AR 72202-2088



(870)680-8278



www.mfgsolutions.org

 **ARKANSAS**
Economic Development Commission
MANUFACTURING SOLUTIONS

"The addition of the cobot and the training we received have been game changers for our business. The cobot has not only increased our production efficiency but has also allowed us to maintain a safer work environment for our team. Our employees quickly adapted to programming and maintaining the cobot, thanks to the targeted training program. We've already seen measurable impacts, including increased sales and cost savings. This investment has positioned Poly-Tech Plastic Molding, Inc. to continue providing the highest quality products to our customers while staying ahead in a competitive market."

-Russell Randolph, Controller