

MMEC PARTNERS WITH PLASTICS MANUFACTURER TO LAUNCH AUTOMATION PROJECTS

ABOUT DIVERSIFIED PLASTICS. Diversified Plastics, Inc. in Missoula, Montana, is a great example of how innovative manufacturing in Montana often grows out of small family businesses. DPI is a custom plastics engineering and manufacturing company, founded in the Reid family garage in 1976 as a local supplier of plastic parts. Since then, the company has grown in both size and scope, offering comprehensive services from urethane casting, thermoforming, machining and injection molding to design, engineering, and tool and die services. The more than 65 employees (including third-generation Reid family members) design and produce tens of thousands of parts each year, still serving clients in Montana, as well as companies across the U.S. and 15 countries.

THE CHALLENGE. In 2021, DPI President and Owner Brad Reid was interested in exploring technology options that would allow the company to automate some of its manual, labor intensive processes. Initially, he saw opportunities to automate the loading and unloading of the injection molding machine, as well as the possibility of automating and integrating a manual swaging process with a subsequent injection molding process. The goals were not only to improve manufacturing line output and product quality, but also to reduce reliance on trained machinery operators during a period of workforce shortages. DPI turned to MMEC, part of the MEP National Network™, for help.

MEP CENTER'S ROLE. MMEC Business Advisor Steve Dybdal worked with DPI to secure a \$6,000 Industry 4.0 Automation grant, which enabled a comprehensive site visit and assessment by a technology engineering specialist. This process was instrumental in helping DPI define its automation goals, evaluate processes, and identify potential projects. During this same period, MMEC provided additional support through the introduction of new manufacturing technologies. For example, MMEC conducted an onsite demonstration of a collaborative robot to showcase potential applications in manufacturing production and related operations. The project helped select and prioritize automation projects that not only provided solutions to the initial challenges, but also complemented longer term growth and expansion plans. To date, technology projects include the deployment of a collaborative robot, automated water bath conveyors and more injection molding overhead robots.

"I've worked with MMEC for years, and they do a great job of proactively sharing information and guidance about emerging opportunities. It helps to keep me ahead of the competition. I probably wouldn't have considered installing a cobot if MMEC hadn't brought one to my facility and shown me its potential."

-Brad Reid, President, Diversified Plastics, Inc

RESULTS



3 new or retained jobs



\$733,000 in new or retained sales



\$440,000 in new investment



\$180,000 in cost savings

CONTACT US



PO Box 174255, Montana
State University
2310 University Way Bldg 2,
Ste 1
Bozeman, MT 59717-4255



(406)994-3812



www.montana.edu/mmec

