PENNSYLVANIA MANUFACTURING EXTENSION PARTNERSHIP

PA MEP serves small and medium sized manufacturers in the state by enhancing their productivity and technological performance to create a positive and enduring economic impact in their communities and in Pennsylvania. Small and medium-sized manufacturing companies represent 12% of the total gross state product. According to the U.S. Policy Institute, Pennsylvania ranks 5th in the nation among all the states in manufacturing employment. Manufacturing businesses provide over 578,000 jobs in Pennsylvania, representing approximately one out of every 11 jobs in the state. Managed by the Pennsylvania Industrial Resource Center Foundation, the PA MEP is a public-private partnership sponsored by NIST MEP. The PA MEP is also supported by the Pennsylvania Department of Community and Economic Development and by the manufacturers who receive essential training and consulting services to increase competitiveness and grow their companies. To serve the regional diversity of the state’s manufacturing base, PA MEP manages a network of seven Industrial Resource Centers who are regional affiliates strategically focused on meeting the needs of the geographic region. Affiliates include: Catalyst Connection (southwest); DVIRC (southeast); IMC (central); MANTEC (south central); MRC (Lehigh Valley); NEPIRC (northeast); and NWIRC (northwest).
ABOUT SINTERGY, INC. Sintergy, Inc. is a world-class manufacturer of custom engineered powder metal components. Located in Jefferson County, Pennsylvania, in the town of Reynoldsville, Sintergy has over 50,000 square feet of manufacturing and office space and around 20 employees. The company supplies components to a variety of manufacturing industries, including automotive, agricultural equipment, lawn and garden, consumer products, and appliances.

THE CHALLENGE. Sintergy was using a manual process to manage statistical process control, which was cumbersome, prone to operator error, and unable to provide timely information. Company leaders wanted an automated system for tracking statistical process control. They contacted the Northeastern Pennsylvania Industrial Resource Center (NEPIRC), part of the MEP National Network™, for assistance in implementing an automated system to alert operators, in a timely fashion, about out-of-process control capabilities.

MEP CENTER’S ROLE. NWIRC utilized its STEM Internship Program to select an engineering student to work on the project for Sintergy. The goal of the project was to reduce process variation and improve the part re-work rate from about 3 percent annually to less than 0.5 percent annually. The requested Quality Engineer Intern focused on identifying best practices, equipment, and available technologies to measure—with minimal operator input—process control variables. The student was also responsible for championing the procurement of the best-fit solution and managing its installation.

By investing in new equipment and procedures for measuring, recording, and analyzing product and process data, Sintergy improved quality and process control, reduced costs, and increased sales. The company added jobs, and the engineering intern trained Sintergy employees on the new procedures as part of the STEM Internship Program.

"Our intern Matt really stepped up to become a valuable Sintergy team member. With his assistance on SPC and data collection, we are leaps and bounds ahead of where we were just a year ago."

- Rick Young, CEO

RESULTS

Increased sales by $200,000
Added 3 jobs
Gained $30,000 in cost savings
Invested $100,000 in new equipment, procedures