



Success Snapshot:

Sintergy, Inc.

Innovative Improvements via STEM Internship

Company

Sintergy Inc. was founded in 2003 and is a world class manufacturer of custom engineered powder metal components located in Jefferson County. These components are used in a variety of manufacturing industries, some of these include; automotive, agricultural equipment, lawn and garden, consumer products, and appliances. Sintergy has approximately 50 employees and their manufacturing facility with over 50,000 square feet of manufacturing and office space, is located in Reynoldsville, PA.

Business Issue

Sintergy was using a manual process to manage statistical process control, which is cumbersome, prone to operator error, and doesn't provide timely information. They wanted an automated system for tracking statistical process control to alert operators, in a timely fashion, about out of process control capabilities. NWIRC helped Sintergy scope a project for a student intern to address this issue.

Solution

STEM Internship Program

Through NWIRC's STEM Internship Program, an engineering student was selected to work on the project to improve quality and process control for the manufacturer by implementing new equipment and procedures for measuring, recording and analyzing product and process data. The goal of the project was to reduce process variation and improve part re-work rate from about 3% annually to less than 0.5% annually. Specifically, the requested Quality Engineer Intern focused on:

- Identifying best practices, equipment, and available technologies to measure, record, and analyze process control variables with minimal operator input
- Procuring and implementing the best-fit solution.
- Developing, implementing and training employees on improved procedures.

Success

The intern successfully completed the project objectives and continued to work with Sintergy while attending school. He continued to make improvements and move Sintergy forward with their growth plans and innovation improvements. "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," said Sintergy CEO, Rick Young. As a result of this work, Sintergy anticipates a \$200K increase in sales over 12 months, creating 3 new jobs, cost savings of \$30K, and an increased investment of over \$100K in the shop.



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