CUSTOM PROGRAM SUCCESS STORY VENTURE PLASTICS, INC.



NEWTON FALLS, OHIO

Efficient Process Cooling System and Industrial Process Projects

Venture Plastics, INC. offers custom injection molding services and custom part design. Founded in 1969, the company provides injection molded components and assemblies to customers in multiple industries. Venture Plastics has facilities located in Newton Falls, Ohio and El Paso, Texas.

PROJECT GOALS:

Reduce operating costs while improving efficiency of plant operations.

SOLUTION:

Install ceramic heating bands and a new efficient material drying system, and replace outdated existing chiller with new industrial process cooling system.

PROJECT SUMMARY:

In 2011, Venture Plastics coordinated with Efficiency Smart to install ceramic heater bands to minimize heat loss on barrels that provide plastic injection into the molds of products. An Efficiency Smart energy consultant reviewed the injection machine press data to determine energy saving potential per machine, helping Venture Plastics prioritize future upgrades to provide the most return on investment. Due to Efficiency Smart's findings, the company installed an additional heating band in 2013.

In 2012, Venture Plastics coordinated with Engineered Process Systems, LTD to replace its existing chillers with an efficient process cooling system, utilizing a high-efficiency chiller and a dry cooling heat exchange unit. The new cooling system utilizes cold outside air to reduce the need for mechanical cooling.

Efficiency Smart worked with Venture Plastics to review the projects and validate saving potential. Venture Plastics was able to reduce energy consumption while lowering operating costs, and as a result of the successful projects, the company has decided to undergo additional energy efficiency projects.



PROJECT FACTS AT A GLANCE

Annual kWh Savings: 386,100 (combined)

Annual Cost Savings: \$37,200 (combined)

Lifetime Cost Savings: \$546,500 (combined)

Payback: 3.51 years (average)

Annual CO₂ Reduction: 756,300 pounds (combined)

PROJECT PARTNERS

Timothy Groff, Corporate Asset Manager, Venture Plastics, INC.

Jim Smith, V.P. of Operations, Venture Plastics, INC.

Kenneth Groff, CEO, Venture Plastics, INC.

Mike Spacek, Director of Energy Services, Engineered Process Systems, LTD.

Tracy Reimbold, Finance Director, City of Newton Falls

