



Service/Product Provider

Rockwell Automation

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Industrial Partner

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Business: Textile / Fiber

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Owens Corning partners with Rockwell Automation to retrofit fans with VFDs, saving \$67,000 annually

Project Scope

Owens Corning and Rockwell Automation installed Variable Frequency Drives (VFDs) on one 125HP cooling fan and three 40HP recirculation fans at the Owens Corning Guelph Glass Plant. The VFDs were integrated with the existing Rockwell Automation programmable automation controller to collect data on motor kilowatts, speed, and torque.

Project Summary

By using real time data collected by the Rockwell Automation controller, Owens Corning was able to reduce the speed of the fans without affecting volume and quality of the fiberglass mat produced.

Reducing fan speed yielded the added advantage of reducing natural gas use in the oven; with less air circulating, there was less heat loss, resulting in less gas needed to maintain the temperature.

- **Energy Savings**
\$67,000/yr (500 MWh), or nearly 50% improvement
- **Investment**
\$68,000 for equipment, with installation performed by Owens Corning plant maintenance staff
- **Financial Return**
1 year payback
- **Other Benefits**
Reduced fan speed contributes to longer motor life, increased safety, and reduced use of natural gas in oven burners

Monitoring & Verifying Energy Savings

Before and after power data was taken using a power meter. The savings data were confirmed using real time data collected from the drives via the HMI (human machine interface) at the full and reduced fan speeds.

Distinguishing Value

From the Owens Corning Guelph plant's perspective, Rockwell Automation has provided cost effective and reliable automation equipment for over 30 years. The technical support from Rockwell Automation and their local distributor Westburne Rudy has assisted the plant in achieving new energy and cost savings.