



Service/Product Provider

Gardner Denver

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Business: Air Compressor Manufacturing

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Industrial Partner

McCain Foods USA

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Business: Food Processing

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Gardner Denver compressors and controls save McCain Foods more than \$50,000 per year

Project Scope

McCain Foods ran three air compressors to supply compressed air for production, with two 200HP compressors running fully loaded year-round and one 150HP cycling to meet the system demand. A compressed air energy audit conducted by Gardner Denver showed an average year-round load of 382 kilowatts. A new variable-speed compressor and controls were installed to optimize efficiency.

Project Summary

By installing a new Gardner Denver variable-speed compressor and control system, the plant reduced energy use by allowing one existing unit to run fully loaded and the new variable-speed machine to match the remaining load. Further energy savings were gained by replacing the dryer, increasing piping, and adding receiver capacity.

- **Energy Savings**
Annual electricity savings of 1,742,825 kWh and more than \$50,000
- **Investment**
\$327,404 in labor and equipment costs
- **Financial Return**
With state incentives, less than 2.5 years payback
- **Other Benefits**
New compressor and dryer added buffer capacity to the system, enabling steady productivity levels, even during maintenance

Monitoring & Verifying Energy Savings

Monitoring data shows a \$5,000/month savings, surpassing the initial calculations of \$50,000/year. This is a sizeable savings considering power costs at this location are only \$0.03/kWh.

Distinguishing Value

High performance of Gardner Denver rotary screw compressors has helped McCain Foods to maintain production at the highest level. Whether constant air demand or a fluctuating day-to-day or shift-to-shift compressed air requirement, Gardner Denver assists in maximizing productivity and energy savings.