

Leading by Example: Norgren Improves Energy Efficiency at Colorado Headquarters



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RICK SEWCZAK
Manager HSE, Norgren Americas

As a world leader in motion and fluid control technologies, Norgren prides itself in keeping its clients operating as efficiently as possible. It only makes sense for Norgren’s headquarters to operate efficiently, too. So when they needed to reconfigure their manufacturing equipment to accommodate a shift in their business, they knew it was time to take a closer look at operations.

A timely rebate from Xcel Energy helped them make the leap.

Engineering expertise

Norgren helps its global customers with overall engineering needs. They connect their people, products and expertise with clients to increase output, reduce energy usage, lower the cost of ownership and increase speed to market. They work in various sectors including commercial vehicle, energy, industrial automation, life sciences, rail and others. Whether providing high-quality pneumatic and fluid control products such as actuators, pneumatic filters, fittings and valves, or helping streamline a transportation issue, Norgren’s goal is always efficiency.

“We also have a corporate mandate to save two percent per year in energy,” says Rick Sewczak, manager HSE, Norgren Americas. Sewczak is in charge of twelve facilities across the Americas and is constantly looking at ways to save.

“This wasn’t the first time they’ve looked at efficiency improvements,” says Rance Exline, Xcel Energy account manager. “They had upgraded a chiller unit, lighting and some equipment on interior fans, too. When I told them we were offering a rebate on a compressed air study, they jumped at the chance.”

PROJECT SNAPSHOT	
Location	Littleton, Colorado
Project	Compressed air study and compressor upgrades
Overall project cost	\$193,380 for both
Xcel Energy rebates	\$32,658 for both
Estimated annual energy savings	421,904 kWh or \$39,000 per year
Payback term	4.5 years for all measures

The study showed a desperate need for variable frequency drives (VFDs) for the air compressors. Sewczak says the demand would drop off around 5:00 p.m. every day, but that they would still run operations into the evening hours.

“The evening need wasn’t nearly as much as we would use during the day, but we still used it,” says Sewczak. “Without VFDs we had no way of controlling that usage.”

Norgren started by fixing some leaks in the piping and receiver systems, accounting for a savings of 77,445 kWh. Then came capital improvements. They opted for a brand new system with both high and low-pressure options.

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New system, higher efficiency

Sewczak credits Exline for quickly getting him all of the information he needed to make the changes. A personal phone call from Exline recommending the study and his understanding of the business got his attention.

“Our energy use is one of the things we can actually manage, plus we trade on the sustainability index so anything relating to sustainability is a priority for us,” says Sewczak.

As it turns out, the overall savings with the upgraded equipment and other efficiency measures exceeded expectations.

“We ended up saving almost 10 percent,” Sewczak said, “and we’ve now received more than \$100,000 in Xcel Energy rebates with all of the efficiency work we’ve done.”

Next steps

The engineering team used ultrasonic testers to do the leak checks. Sewczak decided it was worth buying their own set to send to his other facilities around the world to check for leaks.

They are now considering a Recommissioning study to determine other ways to save energy and money in the aging building. They’ll review automation systems, HVAC equipment, rooftop units and more.

“This is our fourth big success story at this facility, and we’ve proven that efficiency work improves our bottom line,” says Sewczak. “So now when I bring up another project idea, they’re all ears.”

For more information about Xcel Energy’s efficiency and rebate programs, please visit xcelenergy.com/CompAirEfficiency.

Equipment Upgrades Contribute to Big Savings



The piston compressor did not adapt to energy demand variables.



A new compressor featured high- and low-pressure options. Upgrades and efficiency measures resulted in savings of nearly 10 percent.