Ameren Missouri BizSavers[®] Program Energy Savings Case Study

MilliporeSigma

MilliporeSigma is a leading life science research and development company that produces chemical and biochemical products. Pharmaceutical and chemical manufacturing is a very energy-intensive industry, requiring complex equipment to produce safe and effective products and drugs to improve healthcare, food, cosmetics and more. The Energy Usage Intensity for pharma manufacturing is 14X greater than facilities manufacturing other product types. To help keep energy usage and costs down, MilliporeSigma tapped into a variety of energy-saving upgrades for their facility. Combining all of the energy efficiency upgrades MilliporeSigma installed in their facilities, they were able to earn more than \$450,000 in Ameren Missouri BizSavers incentives and reduced their annual energy costs by more than \$354,680!

Project Summary

Over the course of three years, the company has updated thousands of fluorescent tubes, incandescent and HID lamps and fixtures to LEDs; installed HVAC controls, new water-cooled chillers, efficient air compressor motors, commercial freezers and variable frequency drives; and optimized their compressed air systems. Taken together, these upgrades have reduced MilliporeSigma's energy use by more than 5,228,500 kWh every year.

Incentive

MilliporeSigma has earned over \$457,945 in incentives for their energy-saving upgrades from the BizSavers Program. Because of the generous incentives and annual energy cost savings, the upgrades to the facility paid for themselves within two years.

Technology

LED lighting is known for its low energy costs and long life. In fact, LED lamps can save up to 84% in energy costs as compared to incandescent lamps. They also generate less heat, reducing the impact on the HVAC load. New, efficient HVAC systems can use 30-50% less energy than older, inefficient units, and adding additional improvements like HVAC controls and variable frequency drives can take your savings even further. Water-cooled chillers offer an efficiency improvement over air-cooled chillers by transferring heat better, reducing costs and improving comfort as well as being more compact and longer-lived. Old, inefficient or poorly-maintained compressed air systems can be extremely costly. Optimizing system performance and upgrading to more efficient equipment can help reduce pressure drops and system leaks, saving thousands on electricity costs.

Facility Information

Facility type: Industrial/Manufacturing

Measures:

Lighting, Cooling, Commercial Freezer, Water-cooled chillers, Compressed Air, HVAC controls and Motors

Annual energy cost savings: \$354,686

Annual kWh savings: 5,228,506

Total project costs: **\$1,142,338**

Total incentives: \$457,945

Payback: **2.6 years**

Get Started Saving!

Find out how you can save at **AmerenMissouri.com/BizSavers** or by contacting a Business Development Representative at **BizSavers@Ameren.com** or **1.866.941.7299**. Ready to start saving now? Find an approved contractor at **TradeAllyNetwork.com**.



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