

# Mechanical Systems Upgrade

## Lord Corporation Manufacturing Facility

### Project Description

The Lord Corporation Manufacturing Facility, Bowling Green, Kentucky is investing over a \$1 million to install and operate energy efficient equipment and a new energy management control system. To assist in this initiative the Cabinet is providing a grant for \$504,000. Lord Corporation plans to replace an inefficient chiller with a new chiller and associated controls; replace a steam generation system with a high efficiency boiler; and install a rubber preheater metering and scheduling system. The project will be accomplished through a complete turnkey installation and commissioning process and that will have a simple payback of 5.5 years. Lord Corporation will realize an annual utility savings of more than \$170,000 and a 1,433 metric ton reduction of CO<sub>2</sub>

### Project Objectives

- Replace existing Dunham Bush chiller with new 300 ton Trane Centrifugal Chiller with new cooling tower and pumps with variable flow drives.
- Add a new 250 HP Boiler with combustion controls and feed water economizer.
- Schedule rubber preheaters.
- Add metering and dashboards for main gas and electric meters along with 10 additional sub-meters.

### Time-line

<u>Date</u>	<u>Primary Activity</u>
April 2013	Engineering/Design
April 2013	Engineering/Design/Submittals
May 2013	Mobilization/Order Equipment
June 2013	Controls/Chiller Demo
June 2013	Chiller/Tower Rough-in and Equipment
July 2013	Chiller/Tower Installation
August 2013	Chiller/Tower Installation & Commissioning
September 2013	Controls/Metering
October 2013	Metering/Preheater Scheduling
November 2013	Metering System Completion
December 2013	Boiler Room Demo & Rough-in
January 2014	Boiler and associated equipment installation
February 2014	Boiler and equipment installation
March 2014	Complete boiler installation
April 2014	Final commissioning