

**Release Date:** June 22, 2011

**Title: AEC Designs/Installs Annealing Flow Control Panel at Cooper Power Systems**

Atmosphere Engineering has successfully commissioned a nitrogen / dissociated ammonia mixing system to help control the annealing process for laminated steel transformer cores at Cooper Power in Waukesha, WI. The system was designed to monitor furnace atmosphere quality (dew point, oxygen content, and temperature) while controlling the introduction and mixture of gasses to maintain the optimal atmosphere required to anneal the transformer cores that are used worldwide in power distribution systems.

The proper annealing of laminated steel transformer cores is critical to improve the overall efficiency of the power transforming process and thus reduce waste throughout the power grid. While atmosphere quality control and tracking was the driver for the project, the control panel, designed and manufactured by Atmosphere Engineering, also provided a substantial improvement in furnace safety by updating the flow controls to meet NFPA 86 guidelines. In addition to providing gas controls and furnace process tracking, the systems further improved production quality by providing multi-zone control to help control the flow pattern within the large pusher style annealing furnace chambers. The ability to control flow patterns within the heat treatment zones is critical to minimize oxygen infiltration that can damage the cores and reduce gas consumption to reduce production costs.

Cooper Power Systems engineers and manufactures medium- and high-voltage electrical equipment, components, and systems that deliver reliable electric power to homes, industries, businesses and institutions worldwide.

Atmosphere Engineering designs and manufactures integrated flow control solutions for industrial applications.