SMART COOLING

CASE STUDY

Schneider Electric factory

Latvia

“

Electricity consumption decreased by **31%** and cooling capacity generation increased by **29%** on average after the installation of the intelligent adiabatic **Smart Cooling™** system at Schneider Electric’s Lexel factory.”

CHECKED AND TESTED FOR PROVEN RESULTS

Efficacy assessment has been conducted and validated. Testing was performed with BTU liquid flow and temperature meter RIF600 and Eniscope energy monitoring equipment.

CUSTOMER

Schneider Electric is a global leader in energy and automation efficiency. The 184-years-old company, which operates over 180 manufacturing facilities in several countries, has used the intelligent adiabatic **Smart Cooling™** system since 2011.

CHALLENGE

Electricity consumption for cooling comprises the largest part of total electricity consumption in factories. Cooling is critical to ensure production processes in such facilities but energy costs can rank high. Schneider Electric sought solutions to reduce electricity consumption and boost efficiency of their cooling facilities.

SOLUTION

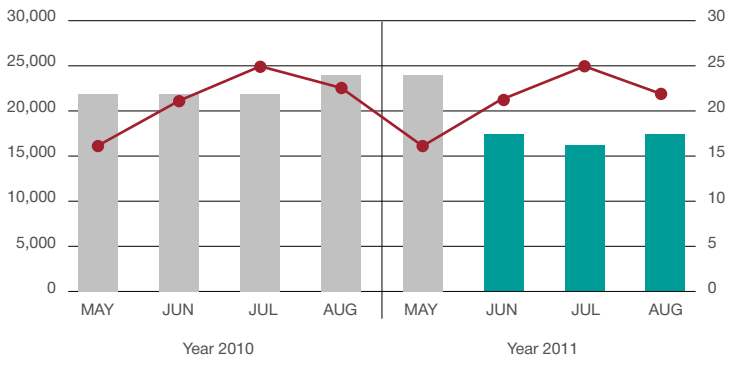
To reduce operational costs with electricity, Schneider Electric opted for installing the intelligent adiabatic **Smart Cooling™** system on Lexel plant’s cooling equipment and supply electricity consumption monitoring to assess the impact of **Smart Cooling™** on the cooling process, i.e. reducing electricity consumption and boosting cooling capacity.

RESULTS

In order to assess **Smart Cooling™’** system benefits, monitoring was conducted in one of Schneider Electric factories and a comparison was drawn between data from 2010, prior to the **Smart Cooling™** installation, and 2011, when the system was in operation. The assessment concluded that electricity consumption dropped by a whopping **31%** with **Smart Cooling™**.

Changes in electricity consumption are depicted in the graph below.

Electricity consumption before and after **Smart Cooling™**



COOLING CAPACITY INCREASED BY ↑29%

ELECTRIC ENERGY CONSUMPTION REDUCED BY ↓31%

ROI 7 MONTHS