SMART COOLING

CASE STUDY

International Airport

Madrid, Spain

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Electricity consumption decreased by 1359kW in 24-hour-cycles and cooling capacity increased significantly after the installation of the intelligent adiabatic **Smart Cooling™** system at the Madrid-Barajas International Airport.”

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.

CHALLENGE

Immense amounts of cooling energy are used for everyday operations at Madrid-Barajas Intl Airport. Operational costs and electricity consumption are equally large under these challenging conditions. There was a need to reduce cooling expenses and increase cooling capacity. **Smart Cooling™** solutions are designed to categorically solve this set of challenges.

Smart Cooling™ allows cooling facilities to operate in lower temperatures by reducing the temperature of inflowing air by using adiabatic cooling technology.

The result is less electricity consumed in the cooling the process and a boost in efficiency. Because of the modular and easily customizable design of **Smart Cooling™** and excellent cooperation with the local team, installation took only 5 days.

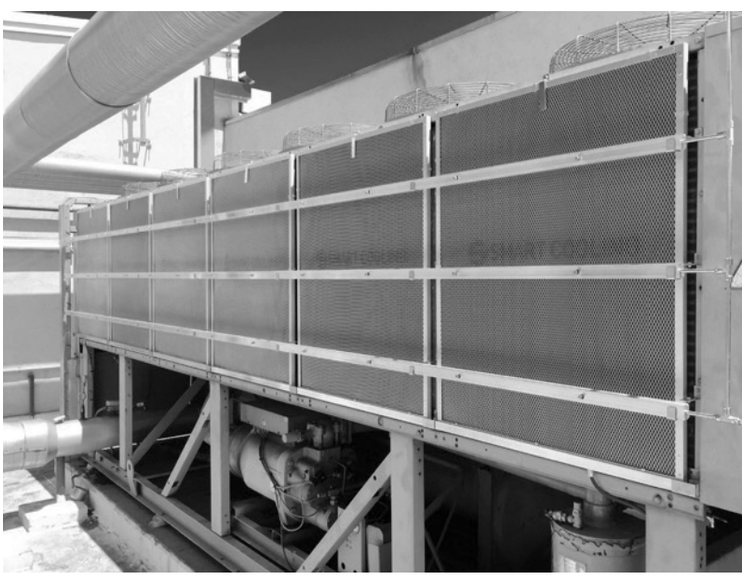
SOLUTION

Madrid-Barajas Intl Airport’s two TRANE RTAC coolers were equipped with the intelligent adiabatic **Smart Cooling™** system. Our state-of-the-art technology provided a considerable boost to cooling capacity and reduced electricity consumption.

Smart Cooling™ modular and easily adaptable design are so easy to set up that installation took only 5 days.

RESULTS

After the installation of the **Smart Cooling™** system the airport’s cooling equipment operates in lower temperature levels and consume less electricity, while generating more cooling power.
According to the client’s technical staff, the positive data after **Smart Cooling™** is as such: electric energy consumption dropped by 1359kW in 24-hour-cycles and cooling capacity increased significantly.
The return on investment period for this particular project is a whopping one month.



COOLING CAPACITY INCREASED BY ↑15%

ELECTRIC ENERGY CONSUMPTION REDUCED BY ↓23%

ROI 10 MONTHS