

CASE STUDY

Premier Palace hotel - Ukraine



*Electricity consumption decreased by 24% and cooling capacity increased by 29%, on average, after the installation of the intelligent adiabatic **Smart Cooling™** system at the Premier Palace Hotel."*



SHAKED, TESTED AND PROVEN.
Efficacy results were tested, analyzed and validated. Tests were performed using **BTU** liquid flow and temperature meter **RIF600** and energy monitoring equipment **Eniscope** analytics.

CUSTOMER

The five-star Premier Palace Hotel has a stellar history dating back more than one hundred years in operation. Premier Hotels are among the finest hotels in the world and provide a unique hospitality experience. In 2009, the hotel was awarded 6 Stars and 7 Stripes by the Seven Stars and Stripes® Committee.

CHALLENGE

In peak heat hours during hot summers the hotel had experienced electricity shortages, which greatly affected the cooling equipment. At outdoor air temperatures of +35°C the cooling equipment compressors would overload and switch off. During heat season, electricity consumption increased by 45% on average at the hotel's TRANE RTAC cooling facility. Such surges meant significantly higher operating costs. The task was set to reduce electricity consumption, especially during hot summers, and boost cooling efficiency to prevent the compressors from overloading.

SOLUTION

The installation of the intelligent adiabatic **Smart Cooling™** system sought to prevent overload and enable the equipment to operate more efficiently. The adiabatic system lowers the air temperature flowing into cooling facilities, allowing them to generate more cooling capacity while using less electricity. The hotel's six TRANE RTAC cooling facilities received the **Smart Cooling™** system.

RESULTS

The report submitted by Premier Palace's technical staff indicates that after the installation of **Smart Cooling™** the equipment got a boost of 29% on average of cooling capacity and electricity consumption decrease by 24% on average.

The equipment does not overload during heat season, constantly operating at normal loads and with shorter compressor cycles. The return on investment period for this **Smart Cooling™** projects of only 8 months.



The intelligent adiabatic **Smart Cooling™** system is a proven, state-of-the-art cost-saving pre-cooling technology.

- Modular system
- Suitable for all types of dry coolers and chillers
- Easy and fast installation
- Certified system and approved by major cooling equipment manufacturers
- Minimal maintenance

