

# CASE STUDY

## Data centers



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After installation of Intelligent Adiabatic Pre-cooling System “Smart Cooling™” on one of World’s Telco giants Vodafone data center cooling equipment (water-cooled chiller Trane), incoming air temperature in its condenser dropped by 12°C which provides a lot better heat exchange.”



### CUSTOMER

One of World’s Telco giants – Vodafone, one of most valuable brands. Company with more than 400 million customers around the world. Vodafone operates in around 30 countries and partner with networks in over 50 more.

### CHALLENGE

As data amounts continue to rise, more and more computing capacities are demanded. This trend directly affects data centers where huge computing equipment operate, as more and more computing power need more and more cooling capacities to ensure optimal climate conditions.

### SOLUTION

Our Intelligent Adiabatic pre-cooling system “Smart Cooling™” is installed on cooling equipment that ensures cooling capacities for Vodafone Portugal data center (two TRANE chillers). Our solution will boost Vodafone data center equipment efficiency. That means more cooling power ensured and minimized electric energy consumption. Because of excellent cooperation with Vodafone technical experts and modular and flexible design of our product, equipment was installed in 3 days. We are looking forward to a successful partnership in the future as well.

### RESULTS

After installation of Intelligent Adiabatic Pre-cooling System “Smart Cooling™” on one of World’s Telco giants Vodafone data center cooling equipment, incoming air temperature in its condensers dropped by 12°C, which provides a lot better heat exchange. Precise data regarding electric energy savings and increase in cooling capacity will be fixed after examination of monitoring data for longer period of operation.

Temperature (°C)	Date	Time	RH (%)	Actual data	
				Energy absorption (kWh)	SAVING
25	24/07/2017 (SM OFF)	18:00	53,3	104,15	21,11%
	29/07/2017 (SM ON)	19:00	61,2	82,16	
30	25/07/2017 (SM OFF)	14:45	40,1	113,50	27,10%
	30/07/2017 (SM ON)	15:00	40,6	82,74	
35	25/07/2017 (SM OFF)	13:15	41,3	111,95	31,99%
	29/07/2017 (SM ON)	12:15	37,8	76,14	



COOLING CAPACITY INCREASED BY

↑ 21%



ELECTRIC ENERGY CONSUMPTION REDUCED BY

↓ 24%

ROI  
8  
MONTHS

New intelligent adiabatic pre-cooling system “Smart Cooling™” is state of the art technology ensuring excellent energy-saving results.

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

