SMART COOLING

CASE STUDY

Vodacom data centers

South Africa

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Electricity consumption decreased by **11%** while cooling capacity increased by **22%** and COP by **39%** after the installation of the intelligent adiabatic **Smart Cooling™** system at the Vodacom site in Pretoria, South Africa.”

SOLUTION

Smart Cooling™ continues to equip new chillers with the new generation adiabatic pre-cooling chiller booster system **PRO 10**.
The York chillers at Vodacom’s data center, with a total cooling capacity of 519 kW, were retrofitted with the intelligent adiabatic **Smart Cooling ™** system to ensure a boost in COP/EER levels and lower electricity consumption.

RESULTS

Test reports at the site show that after the installation of **Smart Cooling™** the chillers now produce **22%** more cooling capacity and electricity consumption decreased by **11%**, on average. Additionally, the cooling equipment now operates under normal loads, the operating cycle of compressors is shorter and the equipment does not overload.

CHECKED AND TESTED FOR PROVEN RESULTS

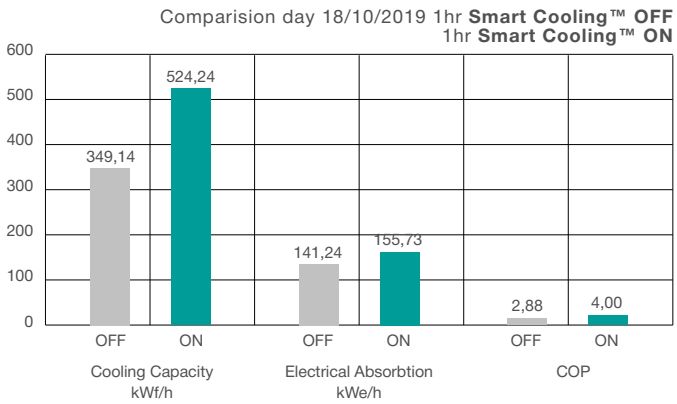
Efficacy assessment has been conducted and validated. Testing was performed with BTU liquid flow and temperature meter RIF600 and Eniscope energy monitoring equipment.

CUSTOMER

Vodacom is the leading mobile network in South Africa with an estimated market share of 58% and more than 103 million customers across the African continent. From its roots in South Africa, Vodacom now provides business services to customers in more than 32 African countries. Vodacom provides coverage to Mount Kilimanjaro and is a beloved brand in South Africa, running optimistic and captivating advertising campaigns.

CHALLENGE

Vodacom’s data center, located in Pretoria, is equipped with York chillers (model YLAA0517) and the company set as a goal to increase the COP/EER rates of its cooling facilities.
The installation of the intelligent adiabatic **Smart Cooling™** system was Vodacom’s choice to aid its current cooling facilities deliver cost-savings and electricity consumption reduction.



COOLING CAPACITY INCREASED BY ↑22%

ELECTRIC ENERGY CONSUMPTION REDUCED BY ↓11%