

CASE STUDY

SEB Bank Datacenters – Latvia



Electricity consumption decreased by 25% and cooling capacity increased by 23%, on average, after the installation of the intelligent adiabatic Smart Cooling™ system at SEB Bank.



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

Stockholm-based SEB Bank is one of the largest Scandinavian banks, serving corporate and private individuals. SEB's main office consists of two ten-story buildings with a combined area of 14,340m².

Two Airwell chillers have been installed at the site to ensure the cooling of the bank's data center.

CHALLENGE

The Airwell facilities needed additional cooling capacity during heat season to ensure the data center was consistently kept cool. In hot summers, when air temperature exceeded +30°C, the equipment was overloaded and periodically switched off. Electricity consumption increased considerably and consequently so did operational costs.

Therefore, it was necessary to provide a solution for ensuring additional cooling capacity during heat season and reduce electricity consumption.

SOLUTION

SEB chose the intelligent adiabatic **Smart Cooling™** system to boost the chillers' efficiency, reduce compressor load and electricity consumption. Now, during heat season, thanks to the adiabatic system the chillers operate in a lower outdoor temperature mode because the temperature of the air flowing into the condenser is 10-15°C lower.

Adiabatic system were installed on both cooling facilities of SEB's data center. These facilities were located on the rooftop and its condensers were subjected to direct sunlight. After the installation of the **Smart Cooling™** system and its uniquely built membranes, additional shading to the condensers were ensured.

RESULTS

SEB's engineering department stated that after the installation of **Smart Cooling™**, the cooling equipment of the bank has been able to produce the required cooling capacity and the heat exchange has improved considerably. Measurement shows that cooling capacity increased by 23% and electricity consumption dropped by 25%, on average. Compressors work at reduced loads and do not switch off during high-heat times. The return on investment period (ROI) for the **Smart Cooling™** system in this project was of just seven months.



COOLING CAPACITY INCREASED BY

↑ 23%



ELECTRICITY CONSUMPTION REDUCED BY

↓ 25%

ROI
9
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 manufactures
- Minimal maintenance

