BANQUE SAUDI FRANSI | JEDDAH, SAUDI ARABIA

Banque Saudi Fransi

CARRIER air-cooled chillers

Chiller electricity use fell 19.20% with GACS adiabatic cooling system

Measured performance from 3 CARRIER chillers upgraded with the GACS adiabatic cooling system

19.20%	8.05°C	3
MEASURED ENERGY REDUCTION	TEMPERATURE DROP BELOW AMBIENT	CARRIER CHILLERS UPGRADED



CUSTOMER

The Banque Saudi Fransi operates Carrier chillers at its Jeddah, Saudi Arabia site.

CHALLENGE

Reduce condenser inlet-air temperature and chiller electricity use during hot-weather operation.

GACS DESCRIPTION

Designed and manufactured in the UAE, GACS combines condenser protection with high-pressure evaporative pre-cooling, multi-stage water treatment, water recirculation and intelligent PLC control. It cools air entering the condenser coils to approximately 2°C above the ambient wet-bulb temperature.

TEST INSTRUMENTS USED DURING THE TEST

BTU Meter	Temperature & Humidity Reader	Eniscope (Energy Meter)
		



GACS installation at the Banque Saudi Fransi, KSA Site

MEASURED PERFORMANCE

THREE Carrier chillers upgraded with GACS used 19.20% less electricity.

During GACS operation, average condenser inlet air was 24.74°C compared with 32.79°C average ambient air, a 8.05°C difference.

TEST CONDITIONS Average ambient 31.63°C OFF / 32.79°C ON | Relative humidity 50.26% OFF / 45.95% ON

Energy and environmental conditions were monitored in both operating modes.