

## SAP in St. Leon Rot

> SAP was founded in 1972 and has become the leading provider of business software with headquarters in Walldorf (Germany) and sales and development centers in more than 50 countries. As the third-largest independent software provider, SAP develops custom-made business solutions for clients all over the world.



SAP's core business activity is selling usage rights for SAP® software solutions and related services. Furthermore, SAP provides maintenance and consulting service as well as training courses specific to these software solutions.



> SAP uses hybrid dry coolers for the recooling of water-cooled chillers as well as for free cooling. To date, SAP is operating 24 hybrid dry coolers with total capacity of 30 MW in St. Leon Rot.

Each cooler is equipped with a **HYBRIMATIC**® single cooler control with a data bus interface to ensure communication with the existing BMS. This allows the BMS itself to optimize consumption of water and electricity.

*SAP office building in St. Leon Rot*

> Engineering a sustainable future

## Sample of design used in the SAP building in St. Leon Rot

### 1. Main data

Cooler type	HTK 2.4 / 10.4-2S-P2-CU-SX3
Number	2 units
<b>Total capacity</b>	2,500 kW (568.7 evaporative tons)

### 1.1 Product side

Cooling media	34% ethylene glycol/water mixture
Medium temperatures (in / out)	93.2° F / 82.4° F
Flow rate	1,690 gpm
Hydraulic connection	Parallel; 2 pass; cross counter flow

### 1.2 Air side

Operating condition of coolers:	Wet mode	Dry mode
Fan speed	100% nominal speed	100% nominal speed
Air condition at the inlet	100.4° F / 32%	63.7° F
Corresponds to a wet bulb temp. of	76.1° F	N/A
Air condition at discharge	83.5° F / 90%	85.8°C

### 1.3 Total wetting water consumption for two coolers

Outside air condition	100.4° F / 32%
Evaporation quantity at 100% capacity	28.3 gpm

### 1.4 Physical data

Footprint per cooler	39'4" x 7'10"
Total height per cooler	12'1"
Operating weight per cooler	26,279 lb.

> Jaeggi – the original