

# Case Study

**weisstechnik provides High-Efficiency Cool Wall System for Data Center at two locations**

## WHY

High thermal load up to 500 kW/room  
High-efficiency cooling [the predefined PUE value was contractually fixed]

## HOW

Cool wall system with cold and warm aisle, supply via raised floor

## WHAT

Extended Vindur<sup>®</sup> CoolW@ll<sup>®</sup> system,  
3 fans [diameter = 630 mm] per module

## WHY - The Challenge.

Akquinet AG is an IT consulting company and ERP specialist that needed IT outsourcing and cloud services capacity for its customers, including public sector clients with sensitive country data.

The MEP contractor and energy specialist Engie Deutschland designed a new Twin Datacenter for Akquinet at the locations Hamburg Alsterdorf and Norderstedt.

Both locations were built in parallel, accordingly the air-conditioning equipment had to be realized parallelly. Of significant importance were the reliability as well as especially the economy, the energy efficiency of the solution and a modular design.

Due to these reasons, Weiss Technik was appointed with the new Vindur CoolW@ll system by Engie.



## HOW - The Idea.

For the air-conditioning of the eight server rooms with the required efficiency and economy, a comparison showed that the Vindur CoolW@ll system could be planned in.

These systems had so far proven themselves mainly in smaller projects and were now used for the first time in a major project.

Vindur CoolW@ll modules are integrated as a partition between the technical corridor. The air conditioning is room-based via cold and warm aisles, the cold air is blown into the cold aisle via a raised floor.

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## WHAT - The Solution.

Vindur CoolW@ll is extremely energy-efficient and very competitive with regard to the investment costs.

It is flexibly scalable and consists of large-area, chilled water heat exchanger modules and EC fans for the air supply.

As it uses almost the entire room height, the Vindur CoolW@ll system increases the cooling capacity and the energy efficiency.

**Chosen Product: Vindur<sup>®</sup> CoolW@ll<sup>®</sup> 300.4 CWH  
with 3 fans each [630 mm]**



In the first construction phase, eight rooms with a thermal load of 300 kW each were air-conditioned. An extension to discharge 500 kW/room is possible without any problems, if required.

## Implemented Modifications:

- Several detailed modifications at the first major project with Vindur<sup>®</sup> CoolW@ll<sup>®</sup>
- 3 fans - each module [diameter 630 mm]