

Case Study

Highly efficient solution for hyperscale data center in Kuala Lumpur

WHY

Efficient, space-saving cooling for a data centre

HOW

Vindur[®] CoolW@ll with hot aisle solution

WHAT

Highest cooling capacity with minimum footprint and increased server capacity

WHY | The challenge.

A leading global software company was planning to build a new data centre for Technology Park in Kuala Lumpur, a major data centre hotspot. The expected heat load was an impressive 1927 kW per room, and multiple rooms were planned for the long term. In addition to efficient cooling, space was a key consideration. The goal was to fit as many server racks as possible into the available floor space.

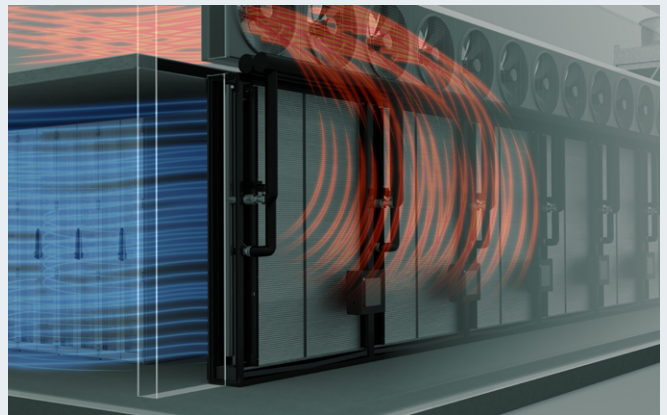
HOW | The idea.

The solution was to implement a hot aisle solution without a raised floor, using Vindur CoolW@lls. These large-area heat exchanger modules used the partition wall between the IT room and the building services for cooling. This eliminated the need for extra maintenance free space.

WHAT | The solution.

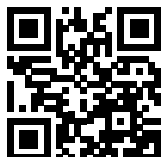
Intelligent air-conditioning

Choosing Vindur CoolW@ll proved to be extremely effective. It offered the highest cooling capacity with a minimal footprint. This allowed the customer to add more server racks and make the most of the space. Its improved serviceability allows maintenance to be carried out at the rear of the unit. This made it possible to place units directly next to each other, freeing up additional space for server racks. The implementation of the Vindur CoolW@ll solution enabled 48 additional racks to be installed, resulting in a significant increase in server capacity. The exceptional efficiency and space savings were so convincing that the customer decided to use the CoolW@ll in the second construction phase on the floor above.



Technical Data:

- ▮ Air volume: 43.200 m³/h
- ▮ External pressure: 100 Pa
- ▮ Cooling capacity: 170 kW
- ▮ Average outlet temperature: 23 °C



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