



Efficient and space-saving cooling for high-density colocation

Datacenter Forum, Oslo

Weiss Technik – Air Solutions



Unstoppable trend towards high-density racks.

The challenge of data center cooling

- DC market is moving towards 20+ kW per rack
- Liquid cooling becomes essential for dedicated AI cluster up to 100 kW and more

Is there an air cooling solution that can bridge up to 50 kW per rack?

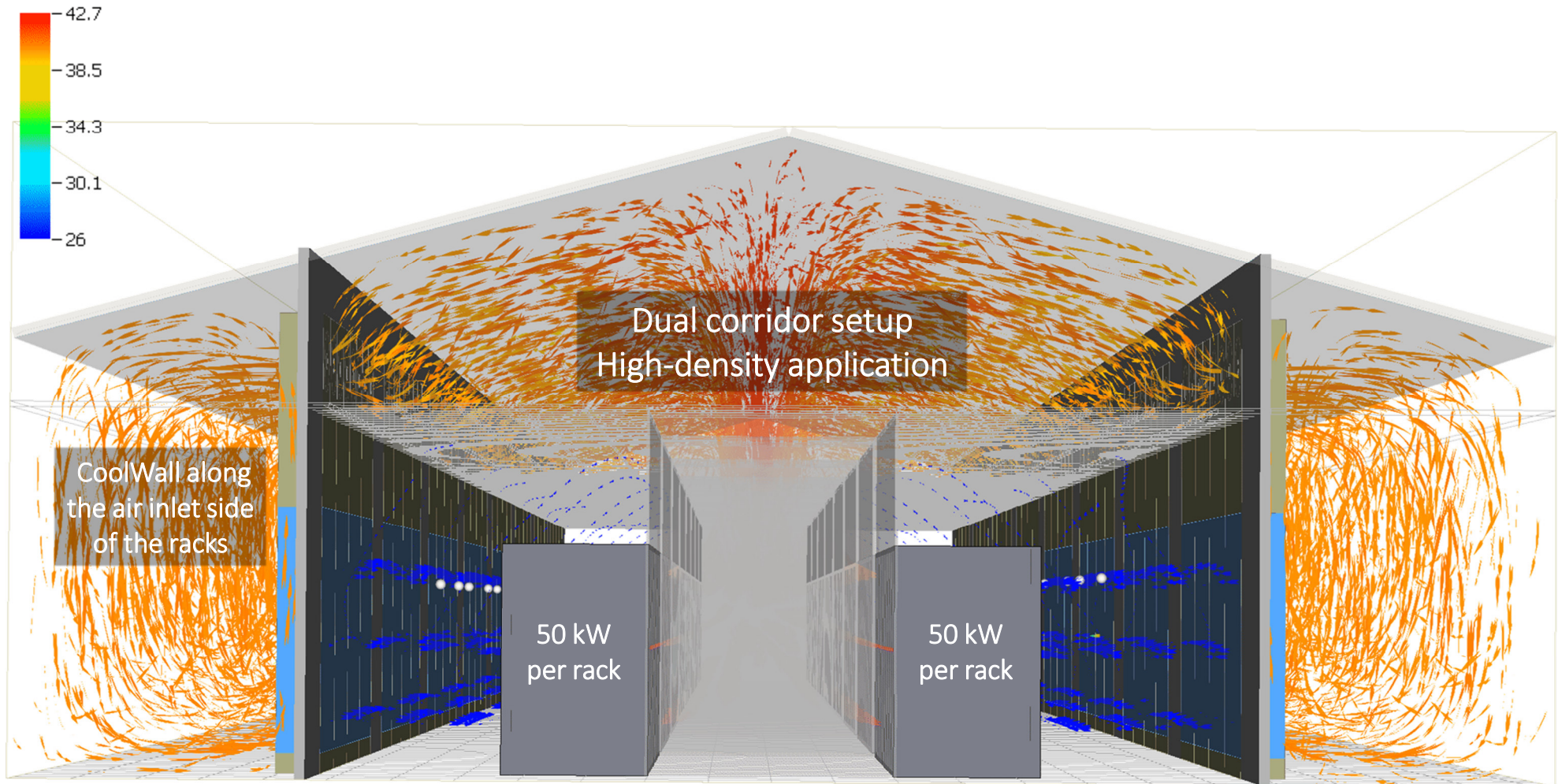
- Physically separated from IT infrastructure
- Space saving on the footprint
- Energy efficient

Cooling wall system

Built-in solution that maximizes cooling potential

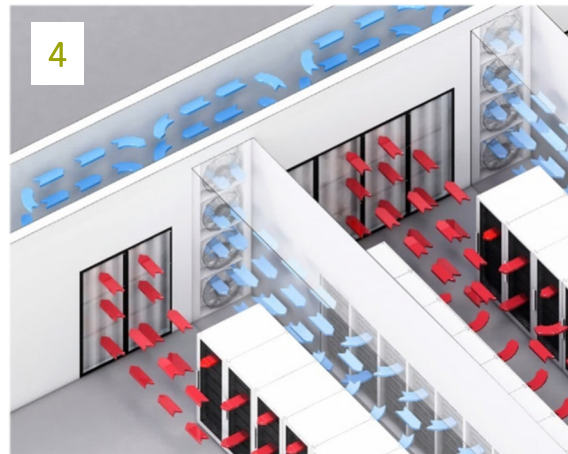
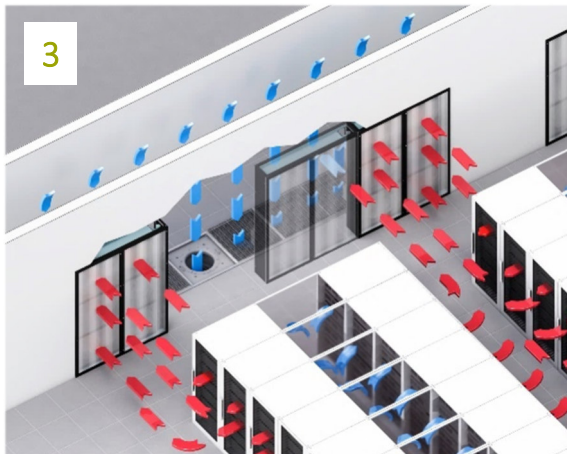
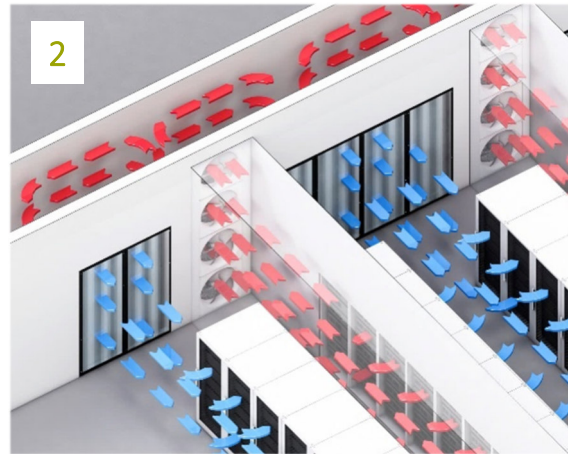
- Utilizing almost the entire room height/width
- Transforming service corridor into a walk-in cooling chamber
 - Enlarged coil and filter surfaces
 - Reduced internal pressure losses
 - Minimized floor space requirement

Best-of-class room-based air cooling – highest capacity per footprint and minimal power consumption!



Flexibly adaptable to individual data center requirements.

Vindur[®] CoolW@ll[®] – various versions



Can be used with a hot or cold aisle containment and adapted to individual room heights.

Hot aisle

1. with return air ceiling
2. without air plenum

Cold aisle

3. with raised floor
4. without air plenum

Air-conditioning for a data center in Norway. Vindur[®] CoolW@ll[®] – Case Study

The challenge

- Air-condition a state-of-the-art data center in Kristiansand
- Efficiently manage heat loads of 32 kW per rack in a limited space

The solution

- CTS Nordics chose Weiss Technik's patented CoolWall technology
- 48 CoolWall kits were implemented in the first building and have been in operation since last year



Weiss Technik – a Schunk company.

SCHUNK GROUP

Competence in materials
engineering and machine
building



BU Environmental Simulation
BU Air Solutions

1,448 billion € sales

100 million € Investments p.a.

68% Equity ratio

9.200 Employees

65 Locations

26 Countries

We are specialists for Clean Air Solutions and Thermal Management.



Operating rooms

Mediclean® OR clean air canopy to protect patients and OR staff



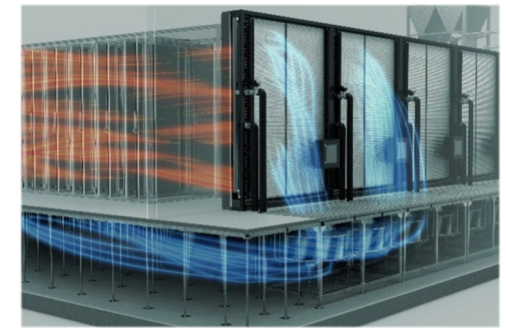
Clean rooms

Cleanroom components and complete cleanrooms according to international standards



Indoor Farming

Vindur® Compact for Controlled-environment agriculture



IT air conditioning

Vindur® CoolW@II® for efficient cooling of data centers



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Weiss Klimatechnik GmbH

Greizer Straße 41 - 49
35447 Reiskirchen – Germany
Tel +49 6408 84-6500
info@weiss-technik.com
www.weiss-technik.com