

COOL-TOP

cooled workplaces





THE ART OF ROOM COOLING THERMAL LIFT REDUCTION

The challenge

Conventional air conditioning systems installed on the ceiling bring cold air into the room from above. Due to the higher density and the associated higher weight, the cold air sinks quickly in the room. This can lead to unpleasant draughts. There are also projects in which the ceiling is not available for technical installations, for example with an atrium.

The solution: targeted use of physics

Cool-Top uses the impulse of fans to bring cooler air from below up into the room. There it mixes with the warm air. The result: stable air stratification with a comfortable, draught-free micro-climate at the workplace. Even at workplaces with high heat loads, the room climate is perceived as natural and pleasant thanks to Cool-Top.

Cooling without loss of space

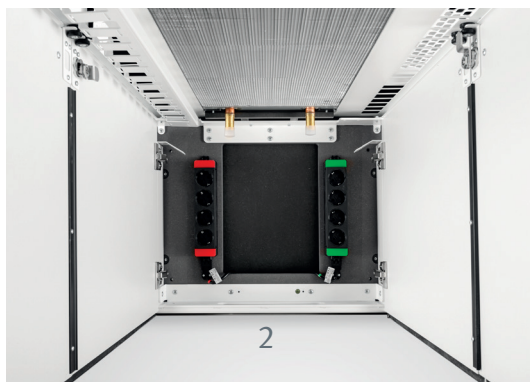
Cool-Top is located where the space cannot be used otherwise: almost invisibly between the desks.

Nordea Bank in Ørestad (Copenhagen)

The centre piece of one of the largest trading floors in Scandinavia is an atrium with around 500 workstations. The entire trading floor is cooled by the unique Cool-Top 25 system, which is integrated into the Orbit Polar height-adjustable dealer desks model. Before the heat can rise uncontrollably into the room, it is encapsuled directly at the source. The new building has achieved the highest level of international environmental certification, LEED Platinum.

COOL-TOP IN DETAIL MAXIMUM COMFORT

A pleasant room climate is a prerequisite for optimum performance. The in-desk Cool-Top system cools both the IT components as well as the room. This creates a unique micro-climate.



1 **Encapsulation of heat**

Capsulation of the heat prevents it from escaping uncontrollably into the room. It is captured directly where it is generated: at the source.

2 **Highly efficient cooling directly at the source**

The integrated high-performance cooler is connected to the cooling water network with flow and return. The coolers operate completely condensate-free with system temperatures close to room temperature. The result is a highly energy-efficient and, above all, pleasant system that is largely self-regulating.

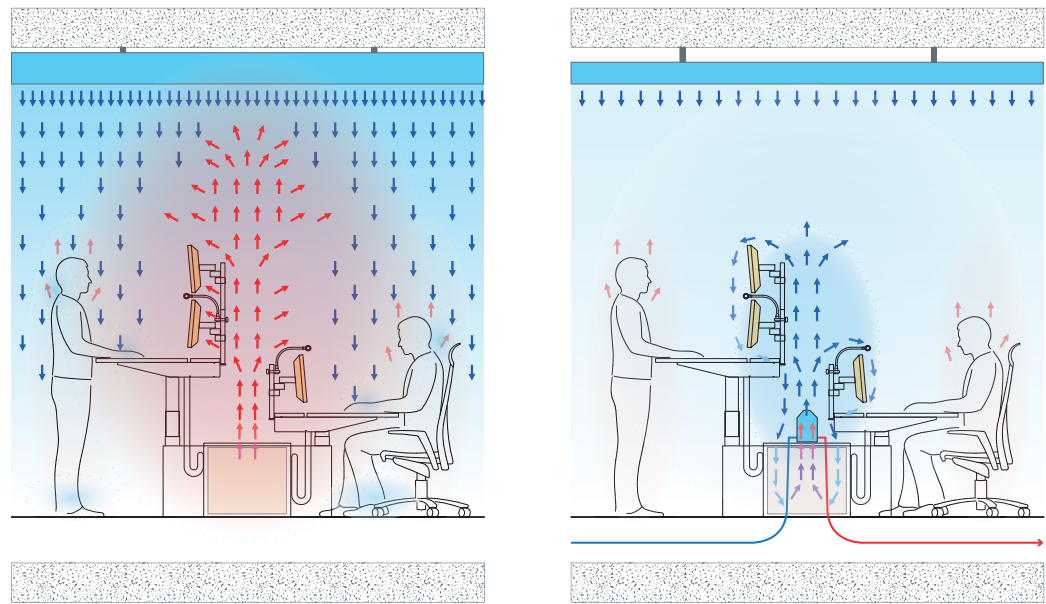
3 **Intelligent air routing**

Erich Keller AG develops and produces all furniture and climate control systems at its headquarters in Sulgen, Switzerland. The result is cooled desks that are perfectly aligned in every respect.

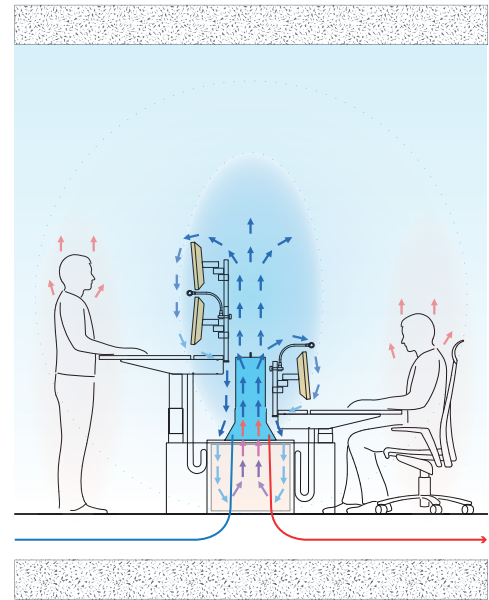
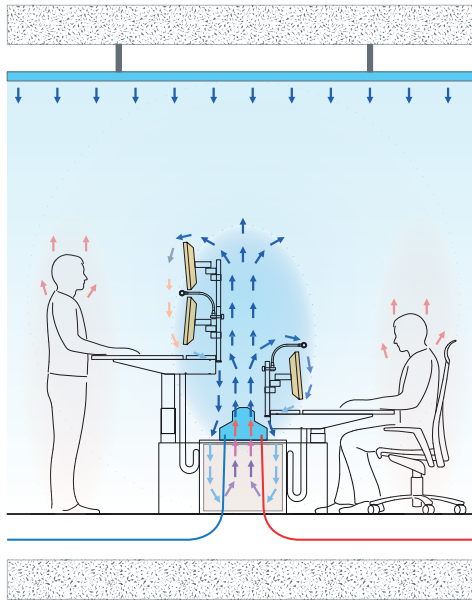




PERFORMANCE LEVELS FOR EVERY REQUIREMENT



Application	Without desk cooling	Cool-Top 10
Cooling type	—	supportive
Combination	Without desk cooling	Room and desk cooling
Suitable for desk models		Orbit
Total cooling capacity	—	< 1000 W
Cooling cap. tech. void	—	< 680 W
Room cooling capacity	—	< 320 W
Power consumption	—	5 W
Hydraulic connection	—	individual
Body design	—	raised / full height technical void



Application	Cool-Top 15	Cool-Top 25
Cooling type	leading	Cool-Top only
Combination	Desk and room cooling	Desk cooling only
Suitable for desk models	Orbit Polar / Zenith Polar	Orbit Polar / Zenith Polar
Total cooling capacity	< 1500 W	< 2500 W
Cooling cap. tech. void	< 1000 W	< 1700 W
Room cooling capacity	< 500 W	< 800 W
Power consumption	5 W	10 W
Hydraulic connection	individual, group	individual, group
Body design	raised / full height technical void	full height technical void

1



3



2





DESIGN VARIATIONS MOULDED SEAMLESSLY

Cool-Top is available in various colours and designs. Regardless of use with the Orbit, Orbit Polar or Zenith Polar communication desk, the modular cooling units form a harmonious package in regard to both design and technology.

The most important drivers for the right design and the corresponding performance level are the IT components. The building situation must also be considered. Thousands of Cool-Top air conditioning units are currently in use worldwide in trading rooms, control rooms and software studios. Our engineers will support you in planning and selection the appropriate system.



1 Cool-Top 10: slimline installation

Thanks to the compact dimensions of the Cool-Top 10 cooling system, even very small desk dimensions can be realised.

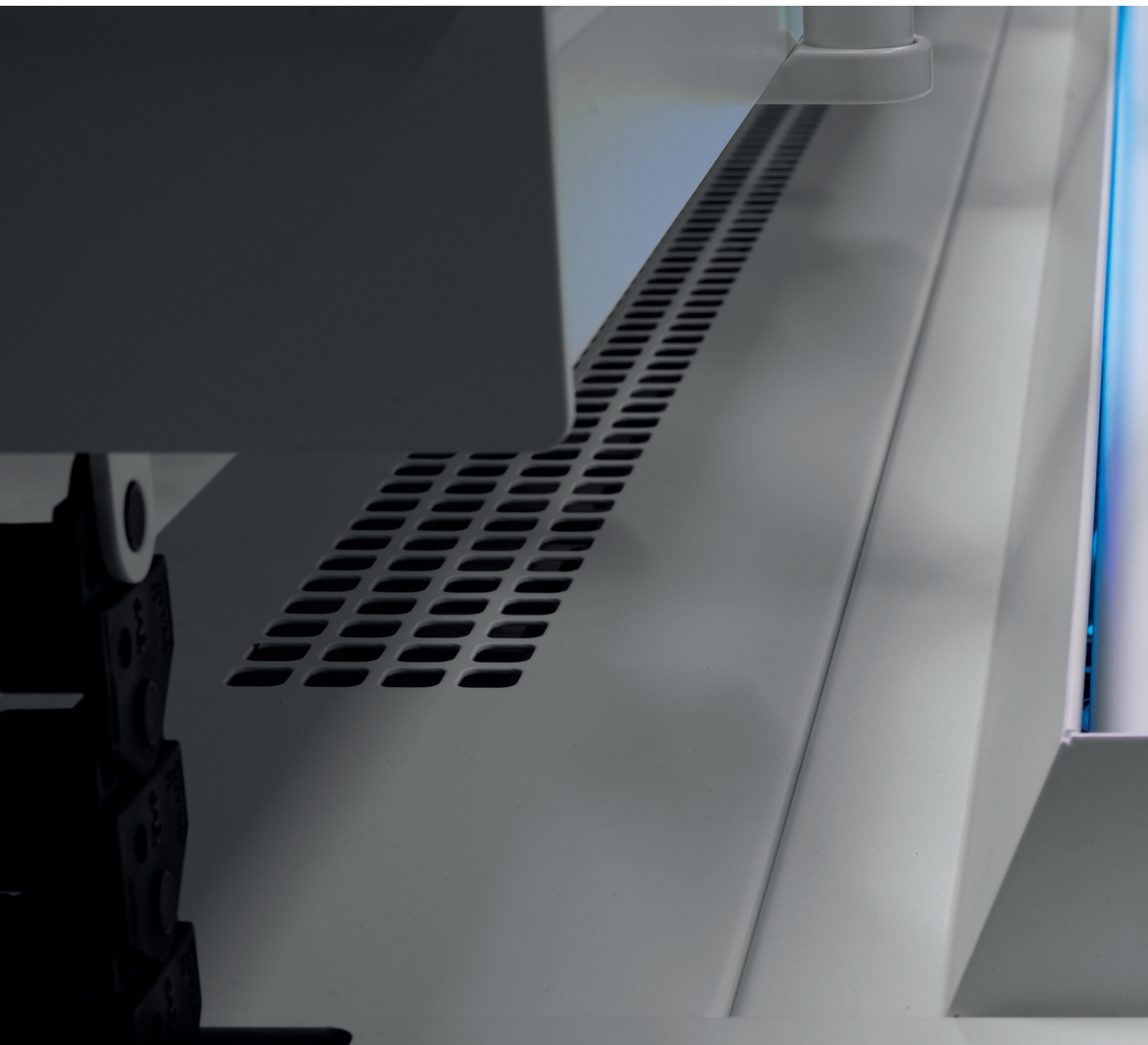


2 Cool-Top 15: invisible from the outside

The solution for dealer and control centre desks with a low to medium IT load and technical components. The heat loads in the technical room and around the dealer desks are sufficiently cooled.

3 Cool-Top 25: powerful

The Cool-Top 25 in-desk cooling system enables draught-free, highly efficient room cooling exclusively via the desk-top cooling units, which are designed for 24/7 use.





INDOOR AIR DISINFECTION VIRUS DESTRUCTION WITH UV-C LIGHT

In cooperation with SterilAir, the leading Swiss provider of industrial UV disinfection, a product range was developed during the pandemic that is now indispensable in system-critical infrastructures.

STERI-PAC is a powerful UV-C lamp that destroys microorganisms such as spores, bacteria and viruses. The Cool-Top table cooling systems can be equipped and retrofitted with STERI-PAC. Tables without Cool-Top can be equipped with a special ventilation kit with built-in STERI-PAC. The UV-C lamps are shielded and therefore harmless.

STERI-PAC is particularly effective against viruses (corona, influenza), mould spores (*Aspergillus niger*, *Aspergillus brasiliensis*) and bacteria (*E. coli*, *listeria*). Reduction rates of 99 % per cycle are achieved for coronaviruses (based on Walker 2007).



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