

Ultra BT in action - a case story

A valuable ventilation upgrade

Return on investment, installation time, renovation and doubts that it will make a substantial difference on performance, risk of illness, costs, energy savings, and the environment are the key arguments why building owners are not modernizing existing ventilation systems. All arguments are literally aired out by the clear and convincing results of the Ultra BT system in action.

73%
cost reduction

68%
energy saving

4.5
years ROI



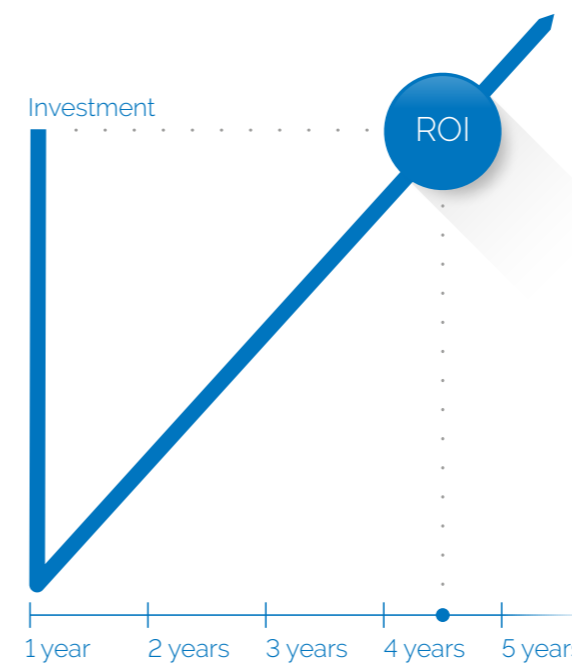
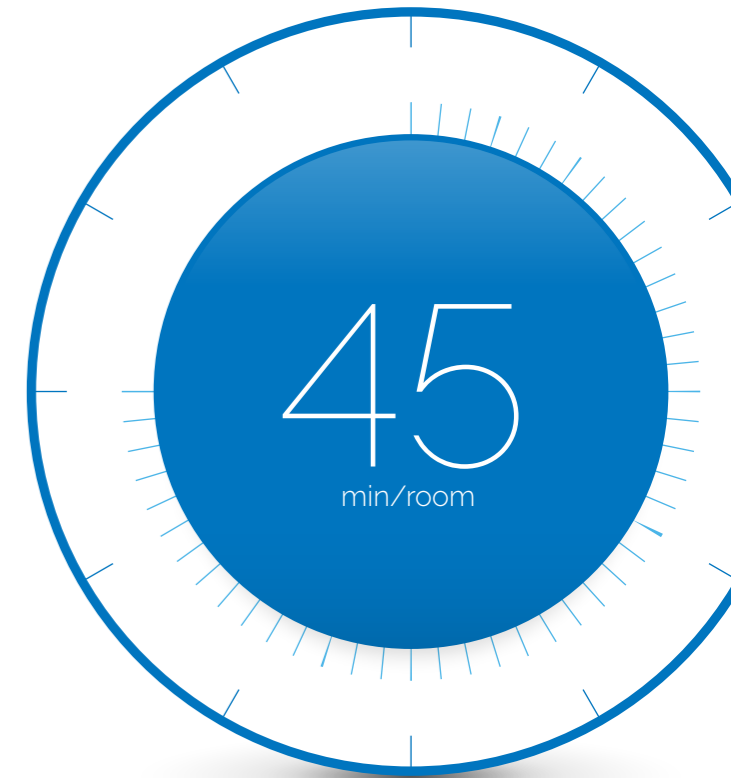
- What?** Restructure of the existing ventilation system in a storage hall and office building.
- Why?** Cooling, improved work environment and noise reduced and optimized ventilation needed.
- Who?** 76 employees and work stations with an average occupancy between 60%-80% on a daily basis, on 830 m².
- Where?** Bargteheide, Germany.
- When?** 2020-2021.

How we cool you down

The building owner of a combined storage hall and office building in our case study had clear goals when starting optimization of the ventilation system. First and foremost, they needed cooling and reduction of energy consumption, but they wanted to reuse as much of the old duct system as possible and ensure a short payback time.

All rooms were equipped with an UltraLink supply air volume flow controller type FTCU supplied with the basic voltage of 24V with a downstream silencer. In addition to humidity and CO₂ sensors, open offices were equipped with up to three presence sensors that detect even the slightest movement in the room. Each room installation took 45 minutes and left no renovation requirements, as there are no re-wiring or in-wall installation needed.

All rooms were setup with the commissioning app OneLink. If wanted, they can all be monitored, set, and reset by employees via the room control app OneSet.



The mind-blowing results

The advantages of Demand Controlled Ventilation are obvious. While the old system has blown a constant 2570 m³ / h into the building, the air volume is now adjusted to fit the actual demand and can blow up to 6000 m³ / h if needed.

Aside from the fact that a survey showed substantial improvement in indoor climate satisfaction, the annual energy costs of the system results in a reduction of 73% compared to the old system and leaves a calculated ROI of merely 4,5 years.

Now those are cool(ing) numbers.