INNOVATIVE AHU TECHNOLOGY IN PAINT-SPRAY LINE

SPORTS CARS MANUFACTURER READY FOR THE 2030 CLIMATE GOALS

The climate challenges and the UN goals for 2030 play key roles when manufacturers around the world seek to implement increasingly important sustainable production solutions and methods. Especially the automotive industry faces challenges to reduce major environmental contributions from the production lines and improve sustainability. An important and often critical area is in the need for efficient HVAC solutions, where future requirements grow rapidly and makes the green technology race spiral with implementation of continuously greener solutions.

SPORTY DYNAMICS MEETS CUTTING-EDGE FAN AND AHU TECHNOLOGIES

Among the manufacturers that already now addresses the climate goals at the end of the decade is a world-famous German manufacturer of sports cars. Apart from the production of cars with sporty dynamics and of which many have become iconic, this manufacturer has upgraded the air-conditioning systems in the paint-spray lines with the latest and very efficient AHU technology.

The top-modern and environmentally friendly paint-spray lines now benefit from the most economical and durable technology for AHUs on the market, which incorporates the extremely efficient NOVENCO® ZerAx® fans.

Just as the aerodynamics of the sport cars ensure smooth and uncomplicated airflows, so do the ZerAx axial fans in the AHUs. The single airflow axial fans are completely unlike centrifugal fans, where the dynamic pressure is lost due to the design. The ZerAx does not throw anything away, as it keeps both the static and dynamic pressures, which result in huge and obvious energy advantages.

Axial fan NOVENCO® ZerAx® AZL

NEW AHU TECHNOLOGY IN THE AUTOMOTIVE INDUSTRY

Sustainability is one the German sports cars manufacturer's prime goals and with use of ZerAx fans they surpass the eco-design requirements set forth in the EU directive 2009/125/EC. In addition, the AHUs with ZerAx fans, in comparison to AHUs with centrifugal fans, reduce investments, save materials, require less space and generally boost comfort levels with low noise and sound.

FACTS

- ENERGY SAVINGS OF MORE THAN 20%
- 20+ YEARS LIFETIME
- 30% SHORTER AHU TECHNOLOGY
- ACOUSTIC DIFFUSERS REMOVE NEED FOR BAFFLE SILENCERS AND REDUCE PRESSURE LOSSES
- DOMEL PM MOTORS UP TO 45 KW
- DANFOSS EC+ CONCEPT

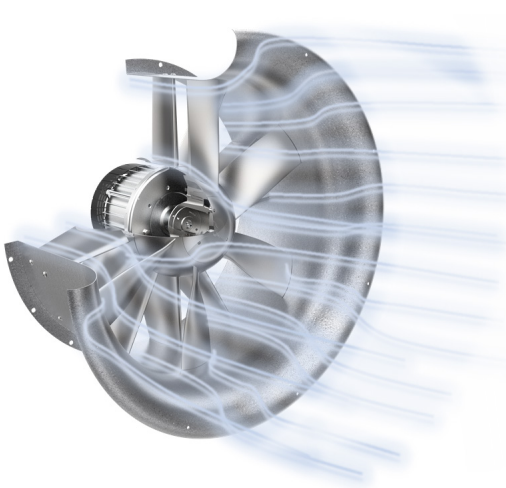
NEW AHU-TECHNOLOGY FOR PAINT-SPRAY LINES

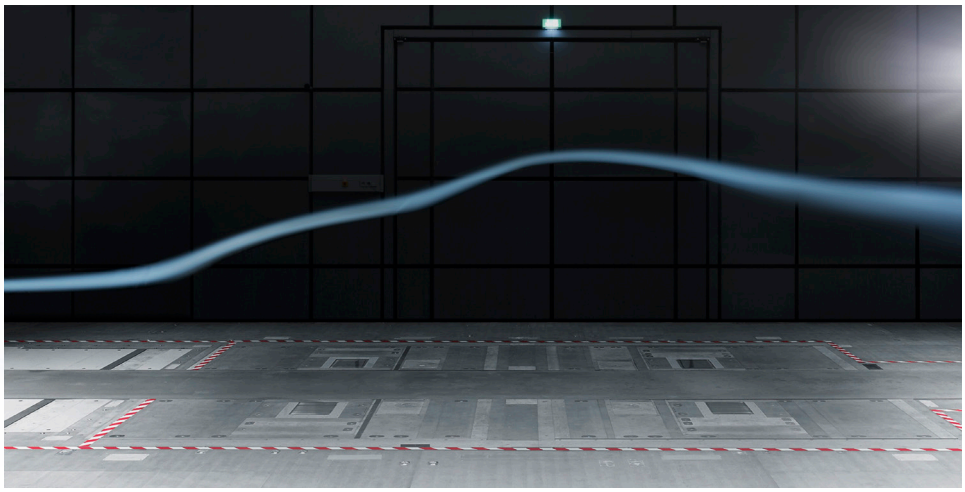
Installation location: Southern Germany
Capacities: 1 AHU with 21,000 m³/h
1 AHU with 6,000 m³/h
2 AHUs with 38,000 m³/h
Air volume: 103,000 m³/h
Number of fans: 11 pcs.
Static pressure increase: up to 1,650 Pa
System efficiency: up to 81 %

THE ZERAX® FAN – A GAME CHANGER WITH 92% FAN EFFICIENCY

The highly efficient ZerAx® axial fans are in fact best in class and are well above the environmental legislative requirements of today in terms of energy consumption, sustainability and reusability. As such they are well-suited for much stricter future requirements.

In this installation, the market-leading fan efficiency of 92% ensures that almost all the aerodynamic energy is preserved and results in the equally impressive system efficiency of 81%. Quite ingeniously the NOVENCO engineers contribute to short AHU lengths with dual functionality as part of the fan design. The diffusers simply double as silencers and convert the airflow velocity into static pressure, while also reducing the sound levels.





What sports cars are for automobiles, so are the NOVENCO ZerAx® for fans.
Both rely on optimal and efficient use of energy to achieve excellent aerodynamics.

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