

Pure competence in air.

BEST POSSIBLE FAN FOR AIR HANDLING UNIT



Building & Industry

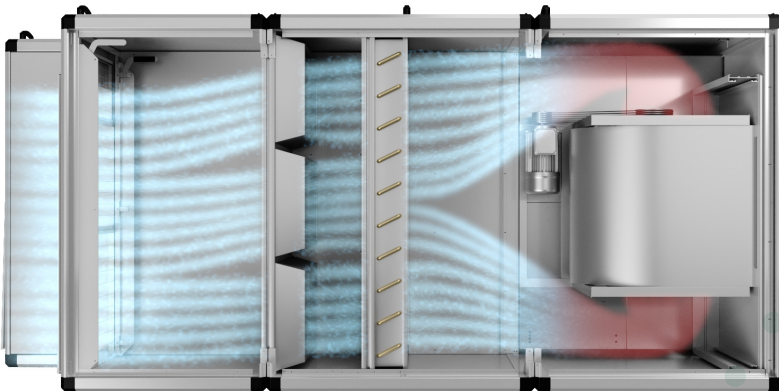
NOVENCO 

SCHAKO Group



- EC+ AHU efficiencies of 85%
- Energy savings of 20-50%
- Product lifetimes of 20+ years
- Recyclability rate of 98%
- Complete plug-and-play
- Ultra-low sound levels
- Low maintenance costs
- ROIs between 12-18 months

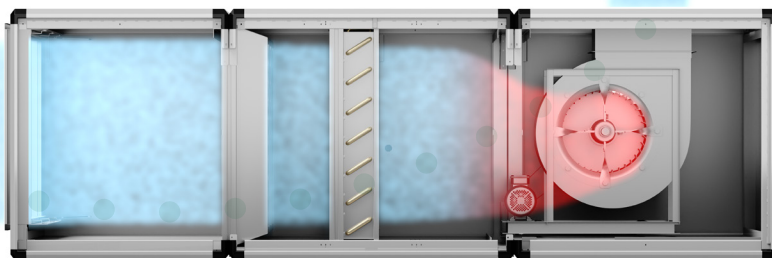
LET THE NUMBERS DO THE TALKING



Horizontal mounting - top view

CENTIFUGAL FAN BELT DRIVE TOTAL EFFICIENCY $\approx 63\%$

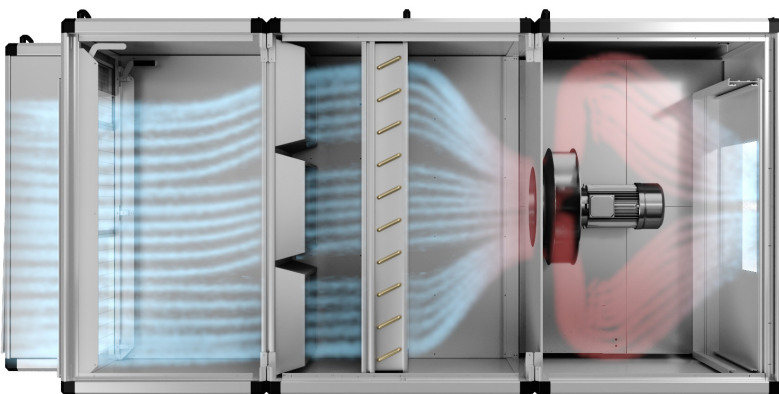
- Centrifugal fan (75%)
- Belt (95%) and AC motor (91%)
- VFD (98%)



Vertical mounting - side view

OUTCOME

High turbulence in fan section reduces efficiency and generates noise.

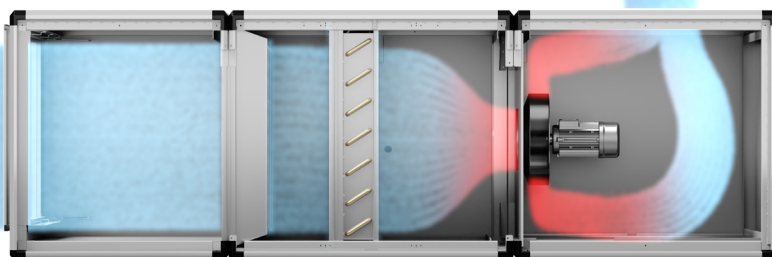


Horizontal mounting - top view

PLUG FAN

TOTAL EFFICIENCY $\approx 68\%$

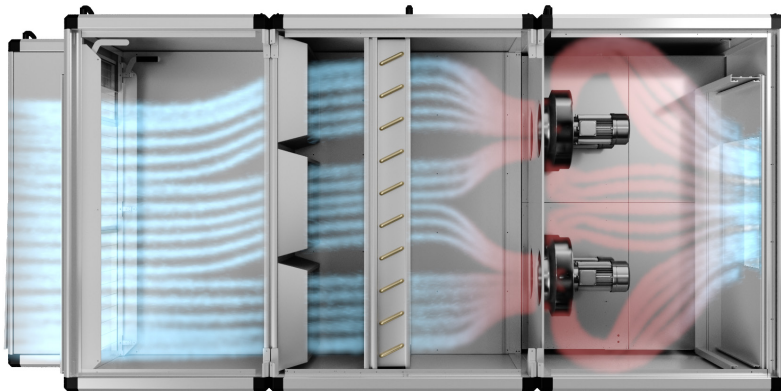
- Plug fan (75%)
- AC motor (93%)
- VFD (98%)



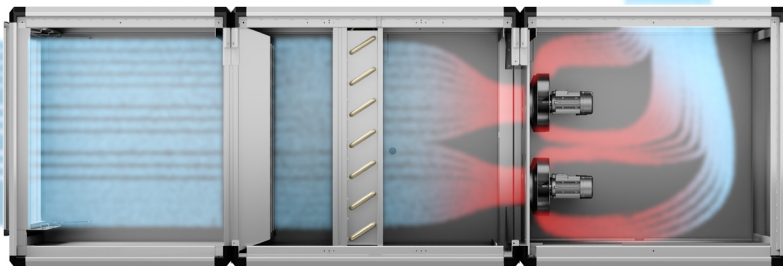
vertical mounting - side view

OUTCOME

High turbulence in fan section, as the discharge air is at 90 degrees to the inlet, reduces efficiency and generates noise.



Horizontal mounting - top view



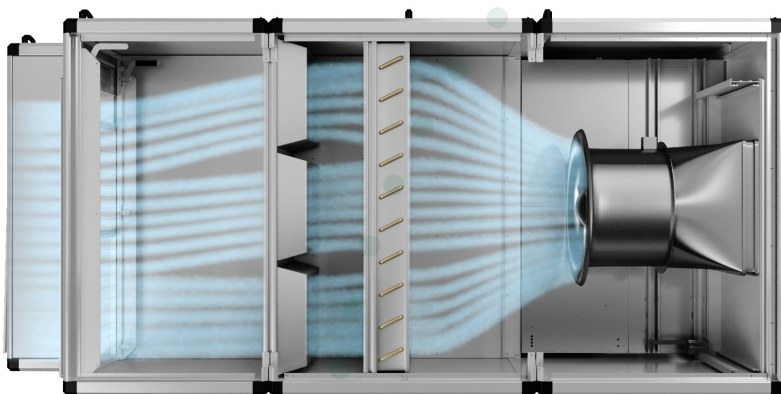
Vertical mounting - side view

4 x EC PLUG FAN
TOTAL EFFICIENCY ≈ 70%

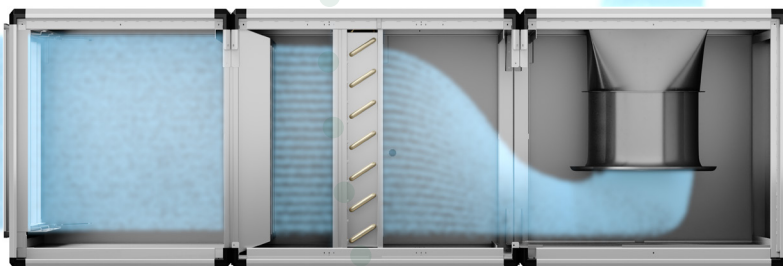
- Plug fans (75%)
- EC motor (93%)

OUTCOME

High turbulence in fan section due to collision of air paths from multiple fans, reduces efficiency and generates noise.



Horizontal mounting - top view



Vertical mounting - side view

AXIAL FLOW FAN
TOTAL EFFICIENCY ≈ 85%

- ZerAx® fans (92%)
- PM motor (95%)
- VFD (98%)

OUTCOME

Smooth air-flow with minimum pressure loss through the AHU.



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THE EC+ EFFICIENCY EQUATION



92%

x



95%

x



98%

=



85,5%

EC+

NOVENCO ZERAX®
HIGHLY EFFICIENT AXIAL FAN

HIGH EFFICIENT
PM MOTOR

DANFOSS VLT® WITH MOTOR
INDEPENDENT TECHNOLOGY



AHU system
efficiencies of 85%



Energy savings
of 20-50%



Lifetimes of
20+ years



Complete
plug-and-play



Ultra-low
sound levels



ROIs between
12-18 months



Low
maintenance costs



Recyclability
rate of 98%

ENERGY SAVINGS WITH NOVENCO® ZERAX® AND EC+

- AT LEAST 20% COMPARED TO BEST-IN-CLASS EC FANS
- USUALLY 40% BY RETROFIT OF OLD PLUG FANS
- USUALLY 50% BY RETROFIT OF OLD CENTRIFUGAL FANS

PREMIUM FAN DESIGN

Factors that make
NOVENCO® ZerAx®
reach 92% efficiency



Minimum
blade tip clearance



Unique
blade design



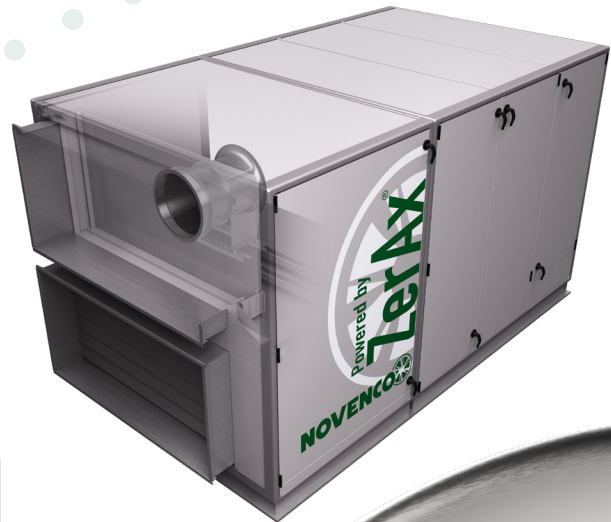
Innovative
hub design



Profiled
guide vanes



Durable
fan casing



NOVENCO ZERAX FANS

- FAN EFFICIENCIES UP TO 92%
- LIFETIMES OF 20+ YEARS
- RECYCLABILITY RATE OF 98%
- COMPACT DESIGN
- EASY INSTALLATION
- ULTRA-LOW SOUND LEVELS
- ROIs OF 12-18 MONTHS



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