The ECFanGrid System

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Visit us at YouTube

The Benefits of the Rosenberg ECFanGrid System are …

… comfortable transportation through existing standard doors, stairwells or elevators with two Persons.

… usage of energy efficient EC-Fans, which are easy controllable through the related Wiring Cabinet.

… redundancy by system and a clever, continuous concept for the best possible availability of the AHU.

… flexibility in Design and optimal usage of the existing Space. Extensions possible.

… floor-free installation results in a comfortable cleaning, which meets Highest Hygienic Standards.

… ease of maintenance and straight forward replacement within few minutes.

Flexible.
Fits in all Air Handling Units.
Manufacturer-Independent.

Complete.
Kit mechanically complete (Fans, Wiring Cabinet, Grid, Screws).

Mobile.
Fit through every standard Door, Staircase or Lift.

We Measure. **You Treasure!**

Effective system rating according to EN 12599

ECOFIT
ETRI
rosenberg
THE AIR MOVEMENT GROUP

*Limited to specific Areas.

3x3 ECFanGrid **Installation Example**

3x3 ECFanGrid with central wiring cabinet and integrated Air Flow Measurement and Display.

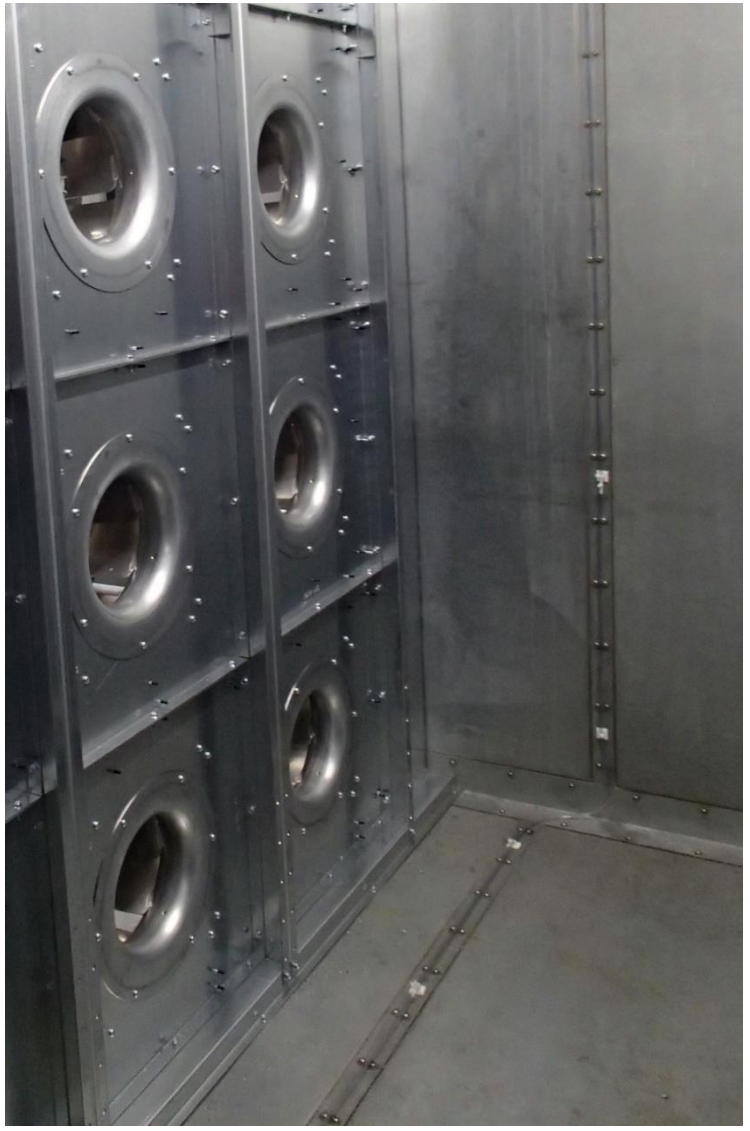
Left. Inlet Area.
Center. Outlet Area.
Right. Wiring Cabinet.

Retrofit – Best-Practice

ECFanGrid 2x3
Input Power
15 kW
22 A

Twin-Belt-Drive
Input Power
19 kW
36 A

Amortization
3,1 Years
CO_2
13 t / Year



Additional Saving Potential through demand speed control not included!

Retrofit – Best-Practice

ECFanGrid 3x3
Input Power
15 kW
23 A

Belt-Driven
Input Power
20 kW
50 A

Amortization
2,9 Years
CO_2
15 t / Year

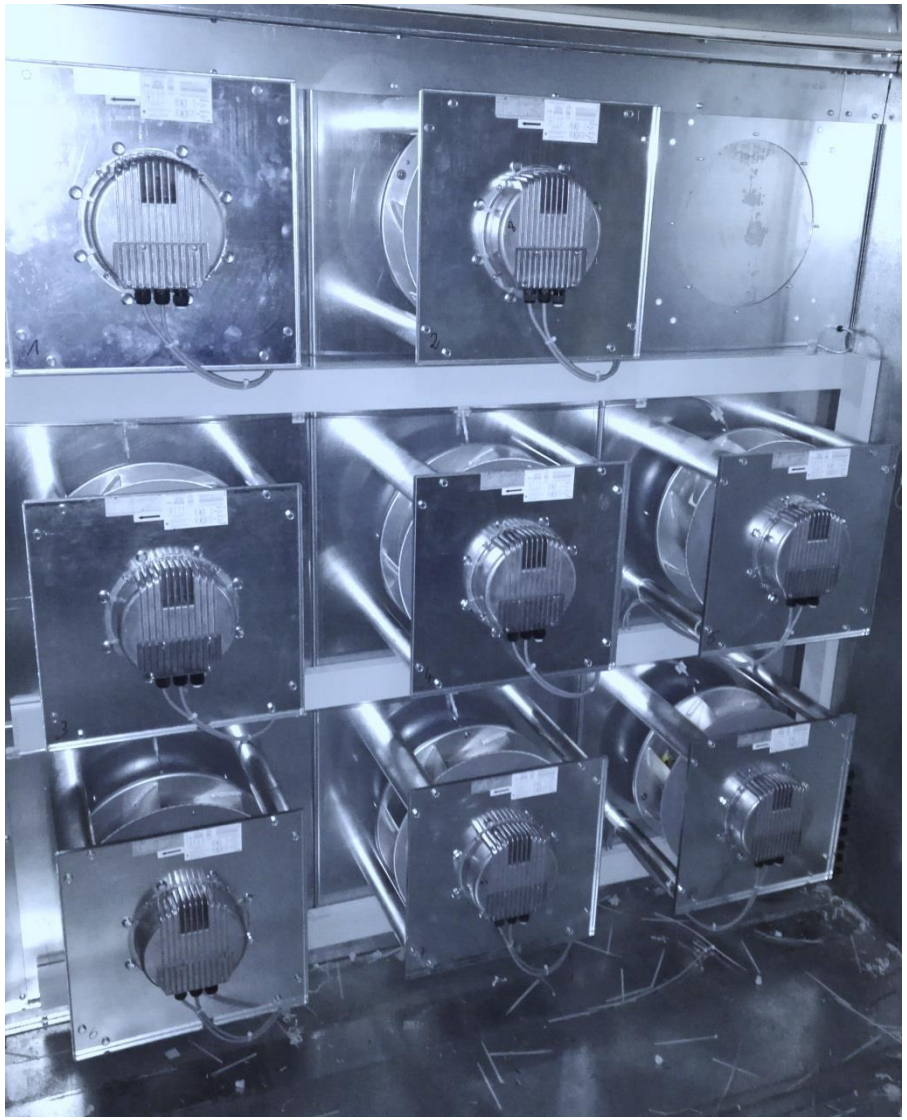
Additional Saving Potential through demand speed control not included!

Retrofit – Best-Practice

2x ECFanGrid 3x3
Input Power
46 kW
70 A

2x Forward Curved Impeller
Input Power
67 kW
105 A

Amortization
1,5 Years
CO_2
100 t / Year



Retrofit – Best-Practice

ECFanGrid 3x3
Input Power
27 kW
41 A

Forward Curved Impeller
Input Power
35 kW
67 A

Amortization
2,3 Years
CO_2
20 t / Year

Retrofit – Best-Practice

ECFanGrid 4x3
Input Power
26 kW
49 A

Belt-Driven
Input Power
32 kW
51 A

Amortization
2,6 Years
CO_2
14 t / Year

Retrofit – Best-Practice

2x ECFanGrid 3x3
Input Power
26 kW
40 A

2x Belt-Driven
Input Power
36 kW
50 A

Amortization
3,5 Years
CO_2
15 t / Year

Retrofit – Best-Practice

ECFanGrid 3x4
Input Power
23 kW
34 A

Axial Fan
Input Power
27 kW
40 A

Amortization
3,4 Years
CO_2
12 t / Year

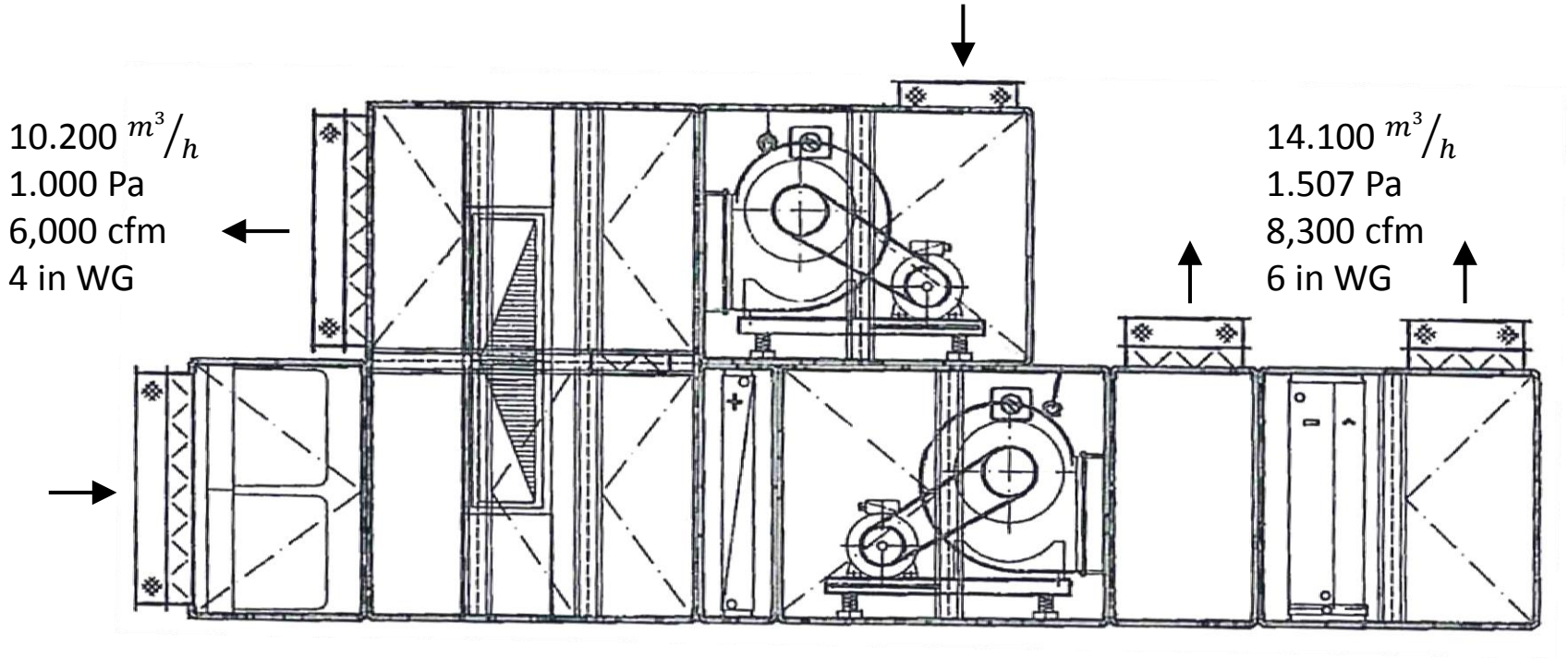
Retrofit – Project Example

PROJECT 3

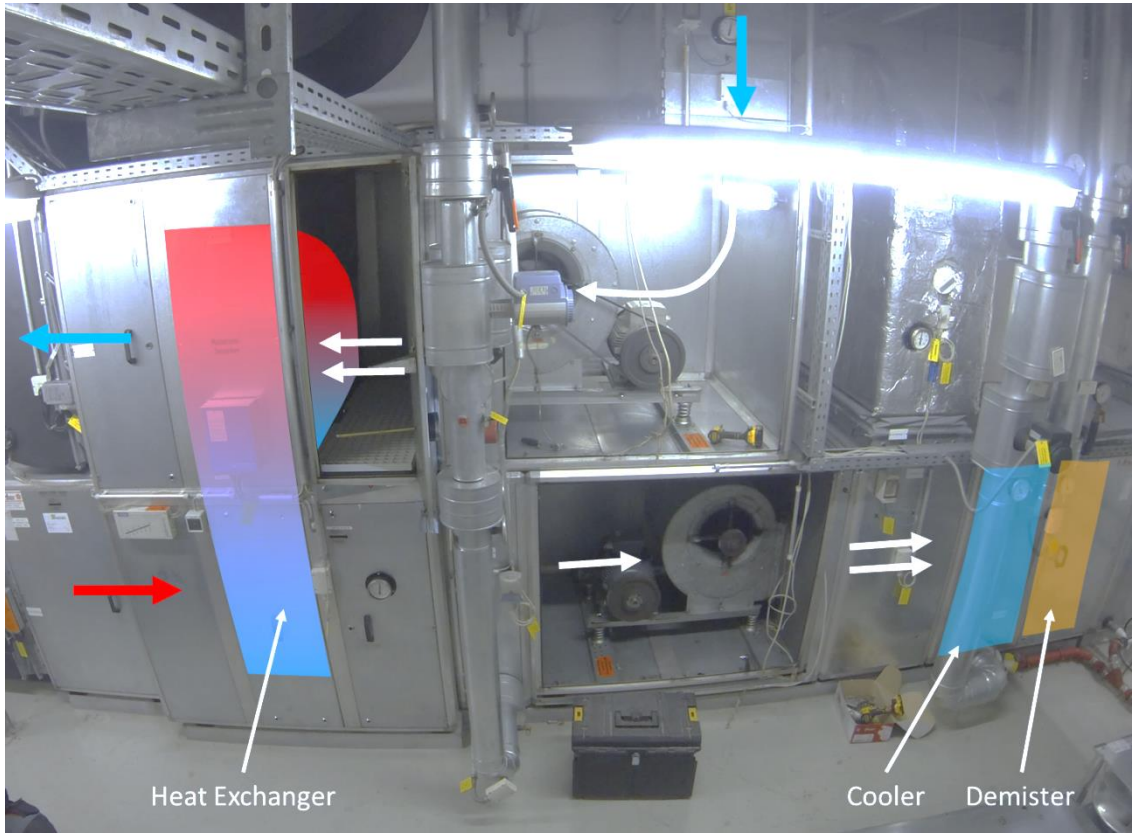
Operating since: **September 2015**

RETROFIT UNIT FROM 1997 with 1x2 (Exhaust) and 2x2 (Supply) ECFanGrid.

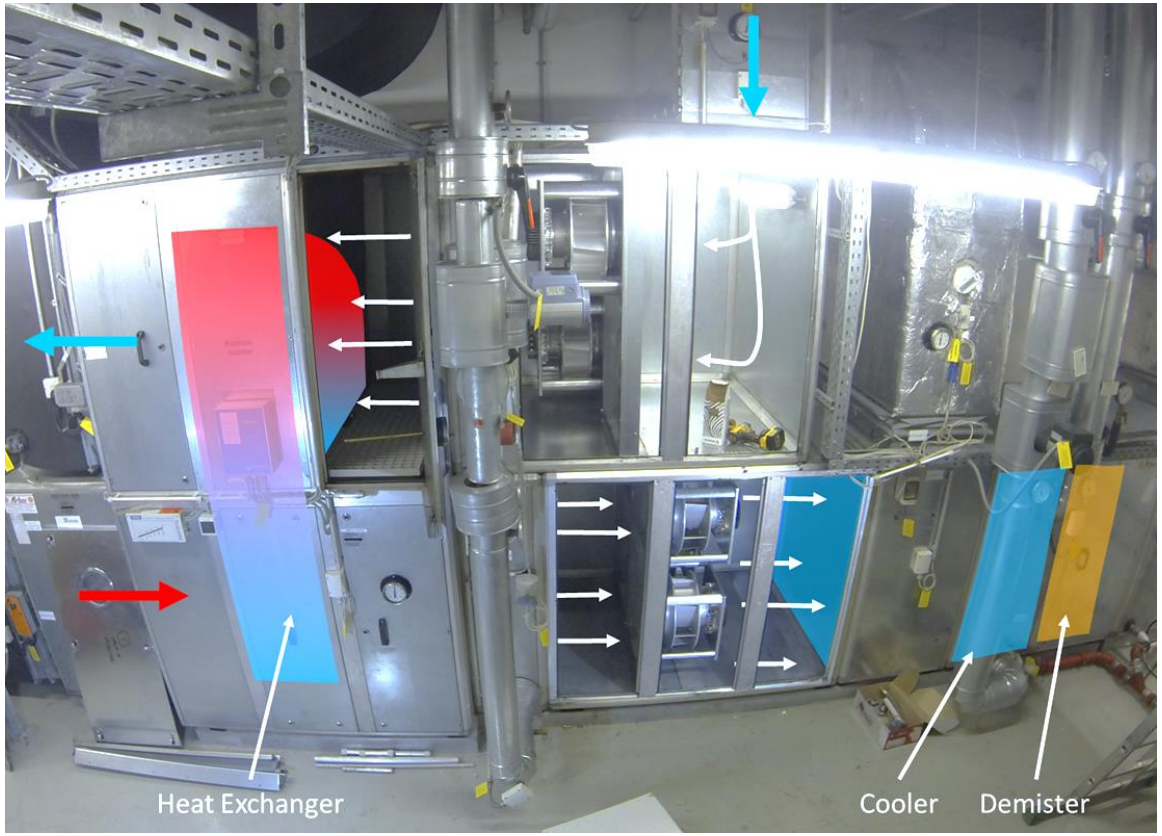
In this arrangement frequency drives were malfunctioned. Customer wants to change to the more reliable ECFanGrid System in order to reduce future replacement costs.



Retrofit – Project Example



Before. Flow towards Heat Exchanger and Cooler was uneven and punctual.



After. Flow is more evenly distributed over the cross section.

Retrofit – Project Example

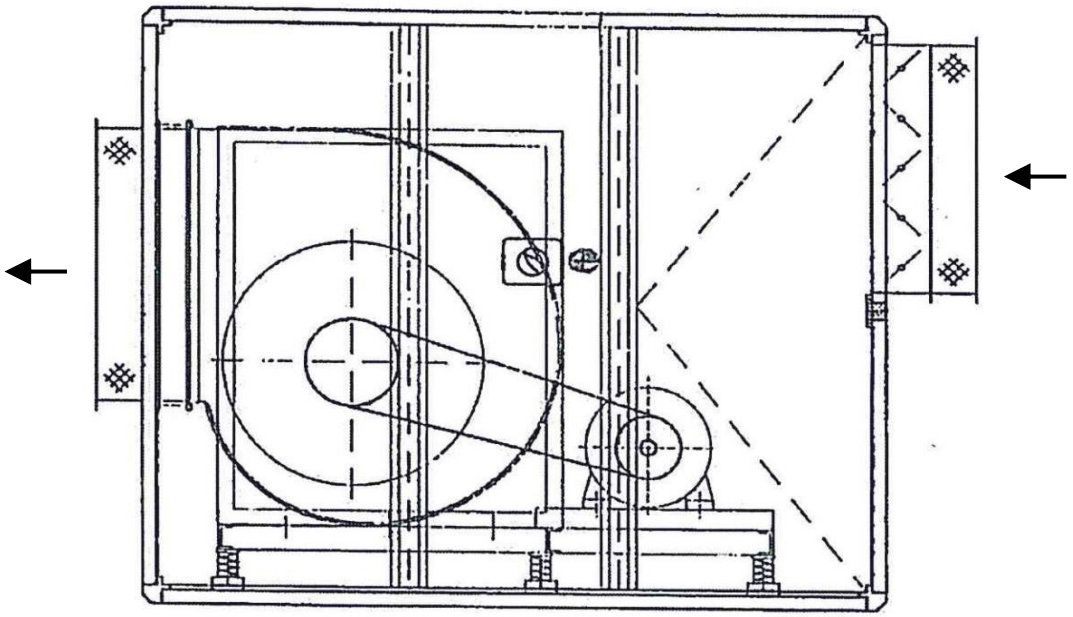
PROJECT 7

Operating since: **August 2015**

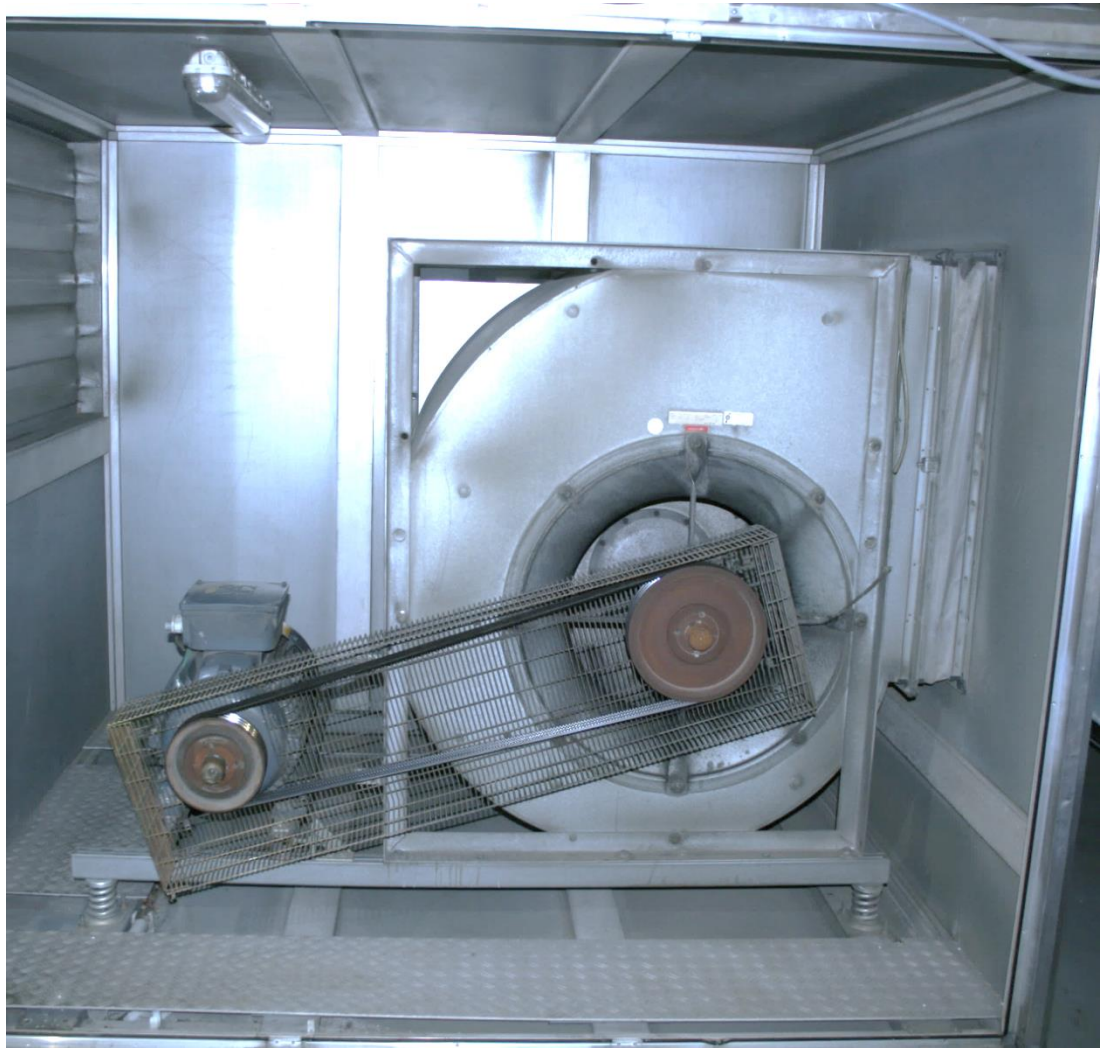
RETROFIT UNIT FROM 2001 with 2x3 ECFanGrid.

The challenge was to replace the old existing malfunctioned belt driven fans with a system, where future replacements were due to limitations in the access area easy to handle by two people.

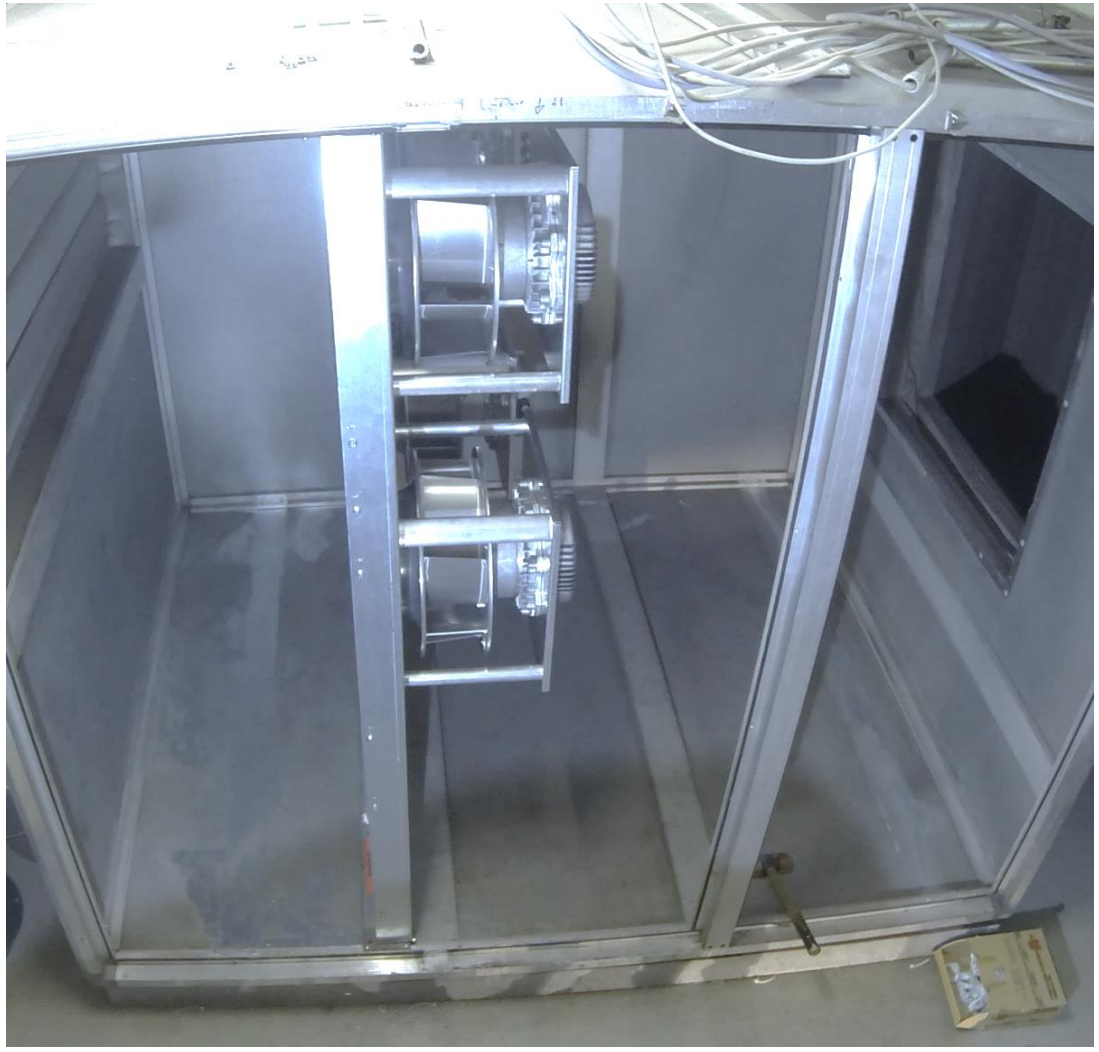
35.000 m^3/h
1.000 Pa
20,600 cfm
4 in WG



Retrofit – Project Example



Before. Maintenance Intense belt driven centrifugal fan.



After. Maintenance-Free direct driven EC-Fans. The bottom row is prepared for a performance upgrade.

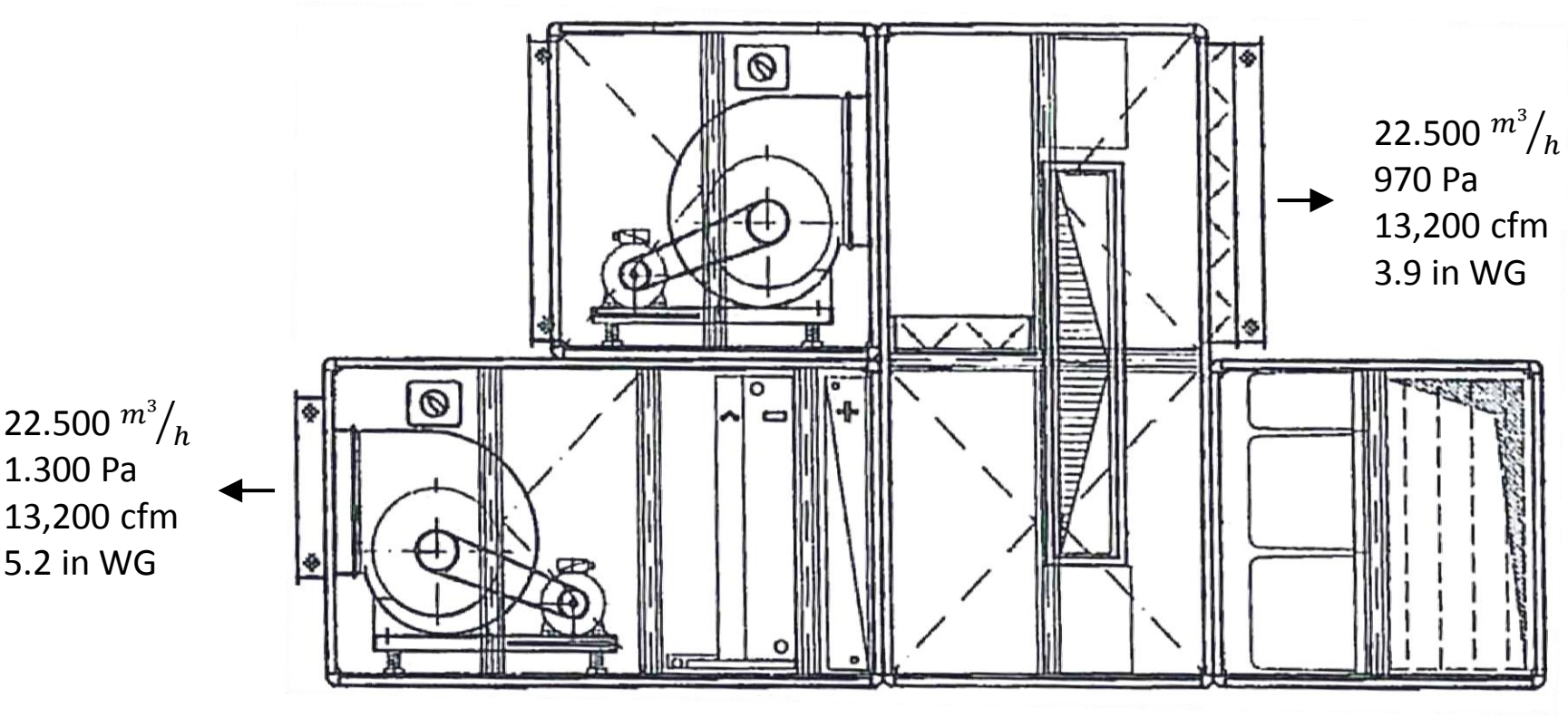
Retrofit – Project Example

PROJECT 10

Operating since: **September 2015**

RETROFIT UNIT FROM 1996 with two 2x2 ECFanGrids

Efficient replacement of two end of life belt driven fans with backward curved impellers.



Retrofit – Project Example

Left. **ECFanGrid Retrofit Unit after the installation with wiring cabinets.**
Right. **Inlet Area. Efficient cleaning through Floor-Free installation.**