



# **ECFanGrid**

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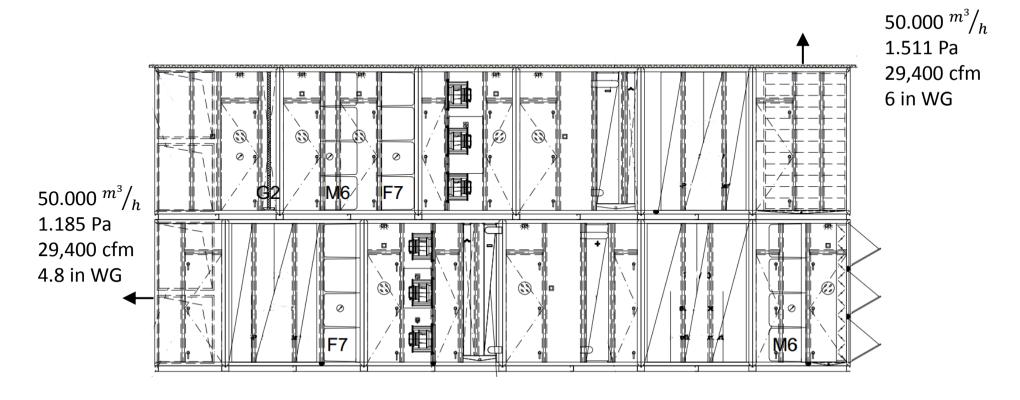


### PROJECT 1

### Operating since: February 2016

### 4x3 (Exhaust) and 4x3 (Supply) ECFanGrid Combination

Outdoor Unit with redirection airflow of 90°. The ECFanGrid allows a uniform distribution of the air velocity over the cross section towards downstream components. The air is applied much better to the filter or cooler surface.







Side view installed ECFanGrid with Wiring Cabinet for 12 Fans.



Inlet View 3x4 ECFanGrid.



### PROJECT 2

### **RETROFIT 3x3 ECFanGrid.**

Supply Air for an entry hall of an airport. The measurement of the unit results in not only savings by the more efficient system, but also due to a adaption of the operating point to the real existent needs, which were lower than calculated.





### Operating since: **December 2016**









3x3 ECFanGrid with a centralized controlling through a standardized wiring cabinet with integrated air flow measurement.

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



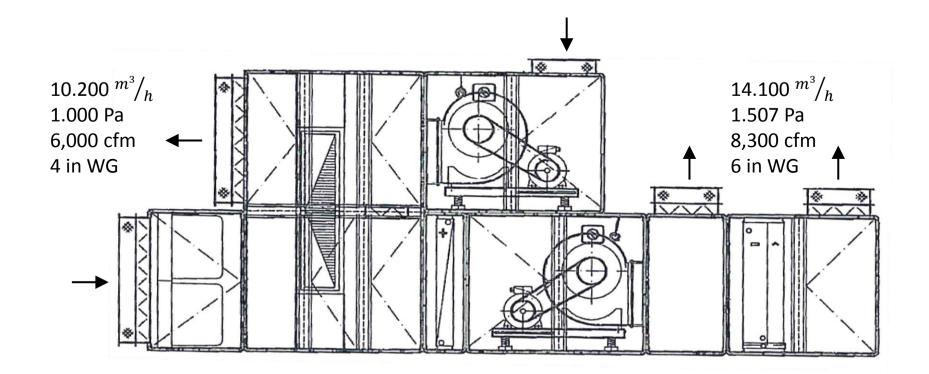


### **PROJECT 3**

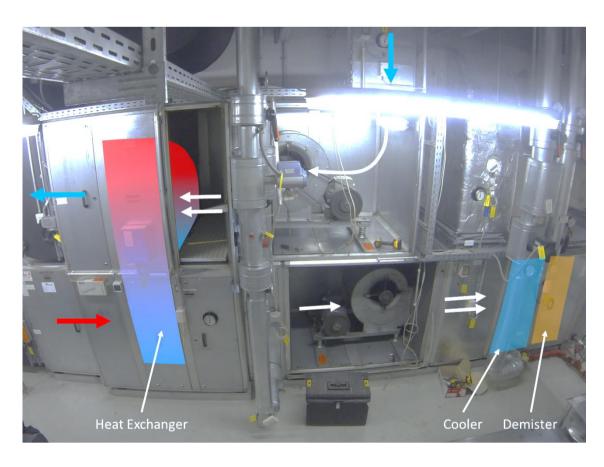
### Operating since: September 2015

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

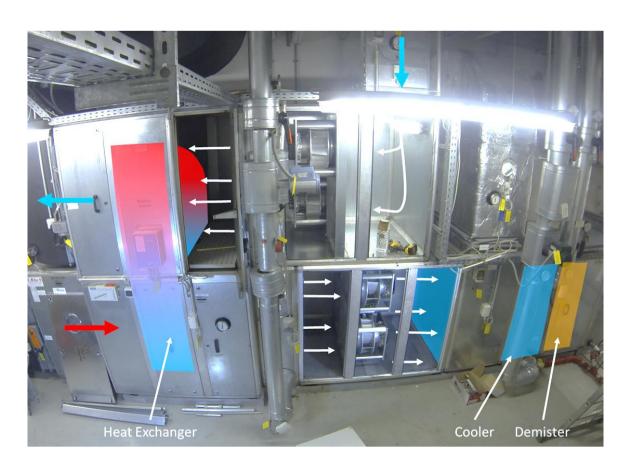
In this arrangement frequency drives were malfunctioned. Customer wants to change to the more reliable ECFanGrid System in order to reduce future replacement costs.







**BEFORE.** Flow towards Heat Exchanger and Cooler was uneven and punctual.



**AFTER.** Flow is more evenly distributed over the cross section.

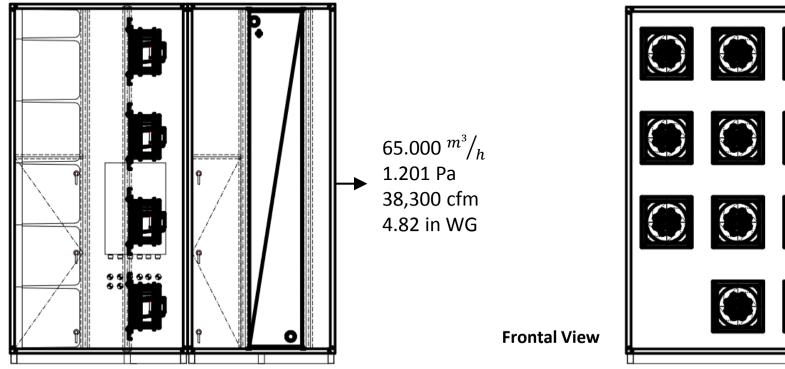


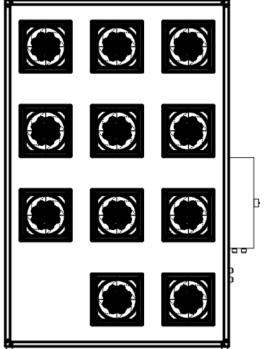
### **PROJECT 4**

Operating since: January 2016

#### 3x4 ECFanGrid Combination

Use in wood industry. Supply for air drying. AHU height over 3 m. The optimum adjustment of the unit dimensions to the customers needs was only possible by using an ECFanGrid.

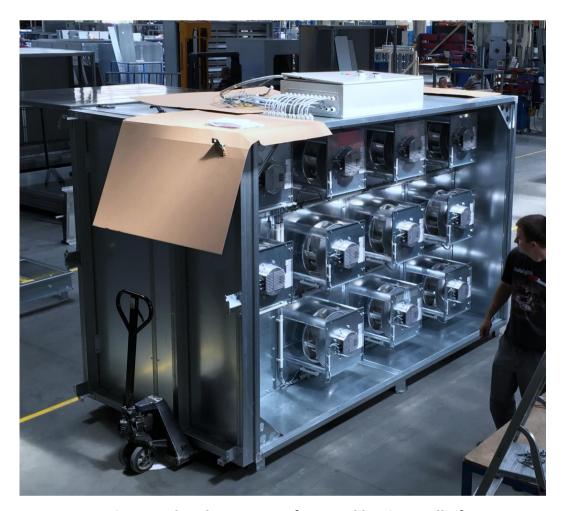








**Outlet Area. 11 Fans.** 



Equipment has been manufactured horizontally for transportation. Because of the height of more than 3 m.

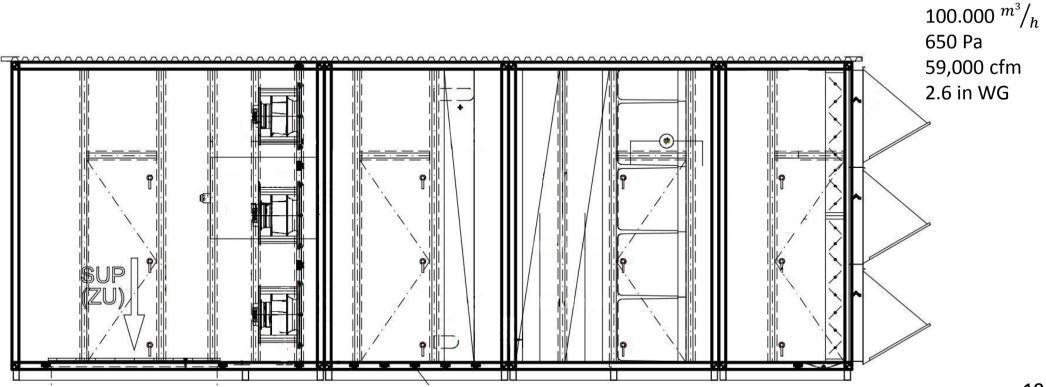


**PROJECT 5** 

Operating since: June 2016

#### 3x4 ECFanGrid

This ECFanGrid arrangement allows a reduction in footprint of 40 %, when comparing the required length needed when using a standard belt driven fan.







3x4 ECFanGrid. Inlet Area.



3x4 ECFanGrid. Part of the Outlet Area.

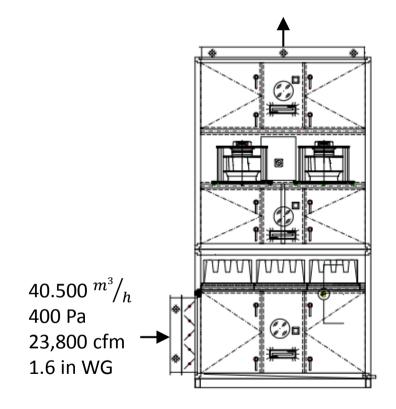


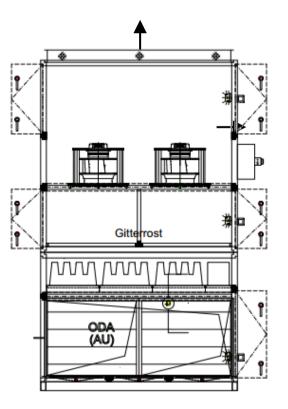
PROJECT 6

Operating since: April 2016

#### 2x2 ECFanGrid Vertical

Application – Glass Industry. Disposal of process air. Lack of space on site due to spatially confined ducts. The ECFanGrid reduced the required floor space by 60 %. Because it is integrated in the "vertical duct", which is needed anyway.









2x2 ECFanGrid Vertical. Special mounted doors for an ease of Replacement and Maintenance.



Arrangement of the four fans with ventilation grille at the inlet.

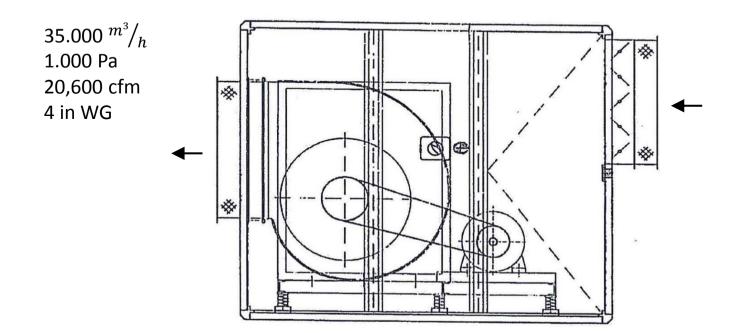


### PROJECT 7

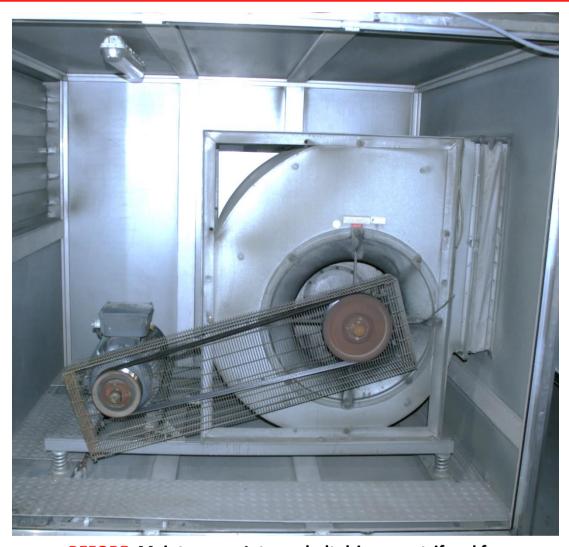
Operating since: August 2015

#### 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.







**BEFORE.** Maintenance Intense belt driven centrifugal fan.



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



### **PROJECT 8**

Operating since: October 2016

22.000  $m^3/h$ 

#### 2x2 ECFanGrid

Standard 2x2 ECFanGrid arrangement. The integrated circular measurement cone each with four measurement points allows a simple and accurate detection of the Air Flow.

1.100 Pa 13,000 cfm 4.4 in WG





2x2 ECFanGrid. Inlet Area.



2x2 ECFanGrid. Outlet Area.

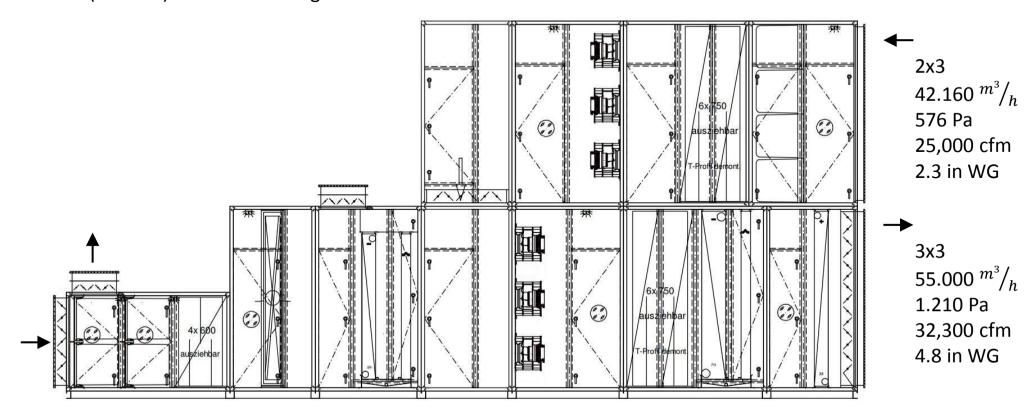


**PROJECT 9** 

Operating since: March 2016

### 2x3 (Exhaust) and 3x3 (Supply) ECFanGrid Combination

The flexible design allows to manage differences in the operating points of the Supply and Exhaust Air very efficient. Here through a 3x3 (Supply) and a 2x3 (Exhaust) ECFanGrid configuration.







3x3 ECFanGrid. Inlet Area. Supply Air.



3x3 ECFanGrid. Outlet Area. Supply Air.

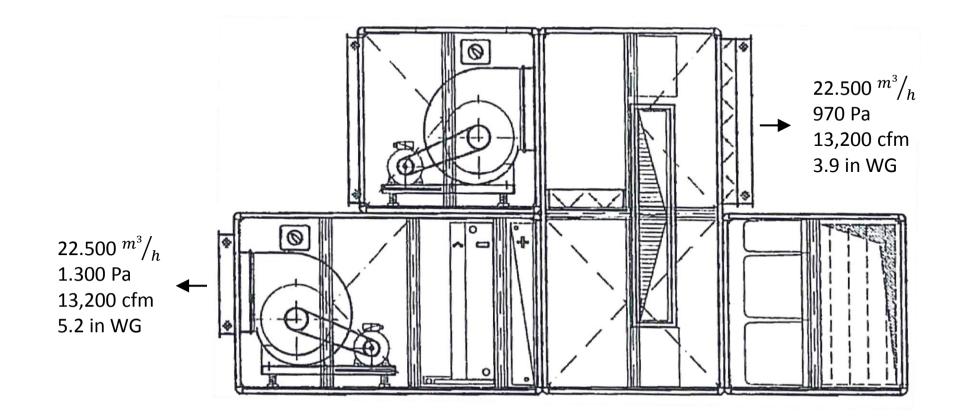


### PROJECT 10

### 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.









Installing the FanGrid is a Two-People-Job.

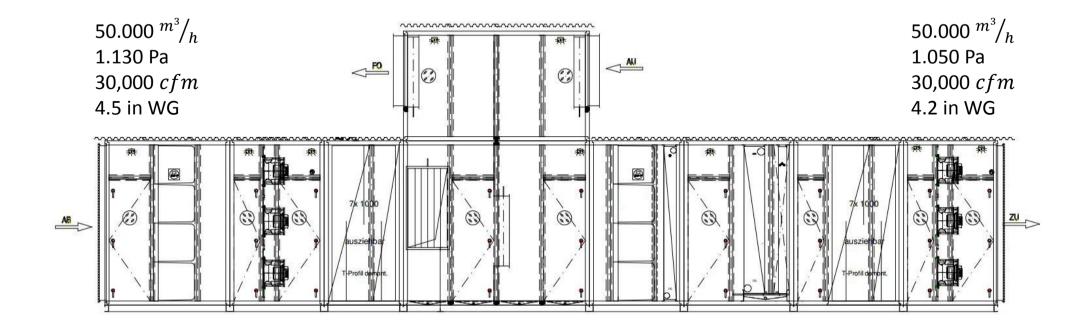
2x2 ECFanGrid. View from side through opened housing.



PROJECT 11 Operating since: July 2016

#### 3x3 ECFanGrid

Application – Banknote Printing. High reliability required. ECFanGrid Built-In Redundancy matched perfect. In addition less footprint was needed for the Unit.







Inlet Area with manual closing elements for treating redundancy scenarios.



Outlet Area. The complete floor area is accessible for cleaning.

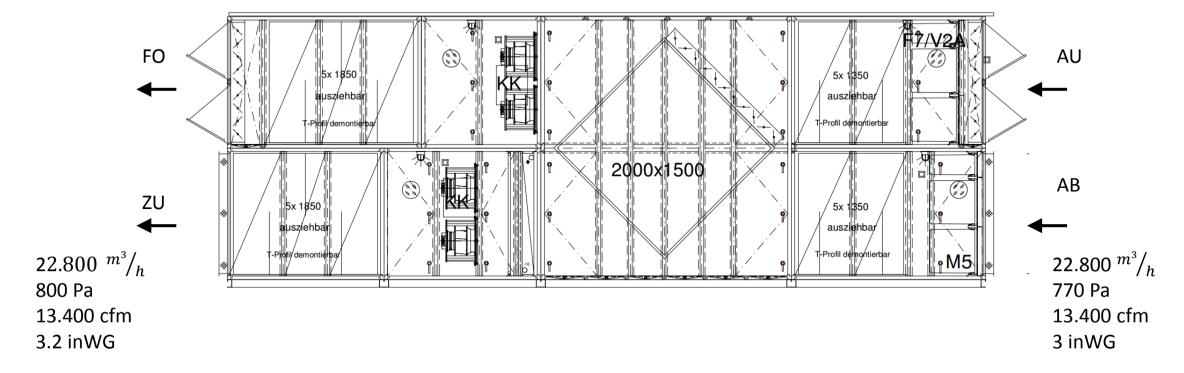


PROJECT 12

Operating since: March 2016

#### 2x2 ECFanGrid

Application – Sports Hall. Outside Unit. Rooftop installation with filter and heat exchanger. The customer had high expectations on hygienic and cleanliness of the unit.







Inlet Area 2x2 ECFanGrid



Outlet Area 2x2 ECFanGrid. Integrated Cone Closing plates on the side.