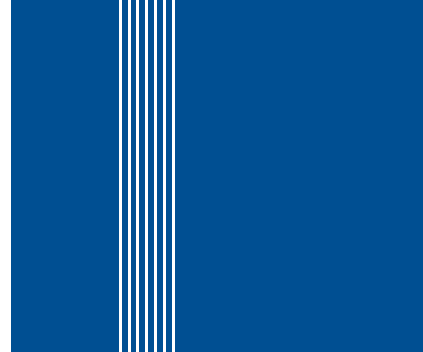


# PRACTICE REPORT 39

Application examples for planners of complex construction projects



**VENTAFLEX®**

More efficiency in air guidance



**New building of a slaughterhouse**

You can find more project examples under [www.ventaflex.de](http://www.ventaflex.de)



## 180.000 m<sup>3</sup>/h total air flow rate for optimal working conditions

Light VENTAFLEX<sup>®</sup> interconnecting ducts make a roof installation possible



### Task

The operation of a poultry slaughterhouse is subject to demanding hygienic and environmental standards. This is why the regulation of temperature, humidity and air exchange as well as cleaning room air should take place over an organic filter, which is installed on the roof of the hall. Moreover the odorous- and noise emissions are not allowed to exceed the strict legally determined limit values.

Another important factor is the smooth maintenance of the duct system. All works must be done accordingly to VDI 6022, so that dirt deposits are avoided and the ducts are able to be checked and cleaned in a regular cycle.

Constructional wise the complex ventilation system is a great challenge: the necessary duct strands including elaborate ventilation technology and an organic filter of large dimensions are not allowed to exceed specific weight – the static of the hall roof sets clear limits at this point.

### VENTAFLEX<sup>®</sup> solution

The structure: In the pressure chamber of the organic filter a negative pressure is created by strong axial ventilators. By this the odorous exhaust air of the production areas hanging/bleeding and brewing- and plucking room is supported, filtered and drawn to the outside by the organic filter.

1. The applied VENTAFLEX<sup>®</sup> ducts made of GRP (Ø 520 to 1270 mm and different formed components) as well as all further components of the system are particularly resistant against contaminated exhaust air
2. Additionally installed silencers (Ø 820 to 1090 mm) were able to be designed smaller thanks to the insulating effect of the PUR rigid foam of the Ventaflex air conduction
3. The air suction takes place in the hall by 13 VENTAFLEX<sup>®</sup> shutter modules with a diameter of Ø 520 to 1270 mm
4. Hygienic characteristics of the air conduction and the low weight were the significant aspects for choosing a VENTAFLEX<sup>®</sup> system
5. VENTAFLEX<sup>®</sup> provided the material according to the demanding schedule so that 10 trucks were able to be unloaded by crane on site

### Advantages due to the VENTAFLEX<sup>®</sup> system

- + Certified hygiene conformity** of the ducts according to VDI 6022
- + Particular durability** due to GRP-material
- + Up to 70 % less weight** – important for statics and handling
- + Reduction of the operating costs** – up to 40 % less energy loss, up to 10 % less pressure loss and up to 99 % less leakage loss

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