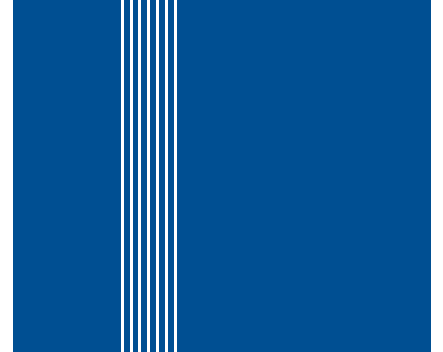


PRACTICE REPORT 38

Application examples for planners of complex construction projects



VENTAFLEX®

More efficiency in air guidance

Initial situation



VENTAFLEX® solution



Hall roof with static challenge

You can find more project examples under www.ventaflex.de



Modernization of a ventilation system on an existing shed roof

Total air volume >140.000 m³/h
for an automotive supplier in south Germany



Initial situation

The supply- and exhaust air units on the roof of the production hall of a great automotive supplier should be modernized.

The new system must efficiently supply the workplace with fresh air and guarantee an even temperature control of the hall at the same time.

The architectural specification was a several decade old construction of a classic shed roof design, which means: not a lot of floor and construction area with limited load capacity.

Task

Since the ridge turrets on the shed roof don't allow any fixing of a ventilation system, the assembly system must be done on a special supporting construction – and always with regard to a most possible low weight. Moreover the volume flows should be controllable in diverse strands in order to allow an adapted ventilation according to the hall conditions.

VENTAFLEX® solution

1. Realisation with VENTAFLEX® oval air conductions with Ø 1270 x 2270 mm in combination with air conduction round with Ø 300 to 1270 mm
2. Individual solutions by custom made formed components
3. Commissioning and delivery of all components according to drawing and construction sequence planning
4. Controllability of the air flow by installing SPS-driven throttle valves

Advantages due to the VENTAFLEX® system

- + Up to 70 % less weight** – important for statics and handling
- + Individual adaption to the conditions** by special components
- + More installation possibilities** due to a variety of construction forms
- + Reduction of the operating costs** – up to 40 % less energy loss, up to 10 % less pressure loss and up to 99 % less leakage loss
- + Proven technology** – technical equipment from one provider

