PRACTICE 43 REPORT 4

Application examples for planners of complex construction projects





Ventilation for an industrial bakery in Wittenberg



Factory hall with long air conduction: 250 m VENTAFLEX® oval "in one piece"

Reliable exhaust air transport in 6 conduction strands – a total volume of 537,000 m³/h thermal- and odour contaminated air ends up safely in the organic filter

Task

Dough production of a superlativ: One of the leading producer of bakery products invested 300 Mio € in a new construction of a factory hall with a total area of 70,000 m². Over 300 employees produce 120,000 tons of bakery products per year – fully automated and in a closed system.

During the production a great amount of odour contaminated, heated air developes, which is cleaned by an organic filter.

A pragmatic solution for the transportation of these immense amounts of air was looked for – and found: the VENTAFLEX® air conduction oval was able to be cut perfectly to the required capacity thanks to the individual size adjustment of the components – and this in an optimally used space in a steel frame along the facade.

Connection of the single conduction segments by VENTAFLEX® oval clamp



VENTAFLEX® solution

- 6 production lines had to be vented in addition the installation was done vertically in a steel frame along the facade of the building. About 1000 m of insulated VENTAFLEX® air conduction were installed in total
- Branch canals of the roof of the factory hall (V2A round) were inserted into the strands of the VENTAFLEX® air conduction
- 3. VENTAFLEX® air conduction oval in the size of 12700/2270 mm were installed
- 4. Thanks to pre insulated conduction, the light weight of the material and the uncomplicated connection of the single conduction segments the system was ready for use quickly. The installation of the VENTAFLEX® system ran time- and cost optimised as ususal



Advantages due to the VENTAFLEX® system

- + Combinability with other duct systems by individual adaption
- Transportation of great amounts of air thanks to big cross sections
- + Ideal space utilization advantage to round ducts
- **Reduction of the operating costs** up to 40 % less energy loss, up to 10 % less pressure loss and up to 99 % less leakage loss
- Particular durability due to GRP-material
- tp to 70 % less weight important for statics and handling

