

PRACTICE REPORT 47

Application examples for planners of complex construction projects

VENTAFLEX®
More efficiency in air guidance



**Clean ventilation for the most
modern machine-tool factory in Europe**

**Application area for VENTAFLEX®:
Insulated air ducts for a corrosion-resistant
and low-maintenance roof installation**

Best working conditions in the new production facility of the Chiron Group SE

Clean air for factory and office building with a total volume of 24.400 m³/h

Task

The Chiron Group, which is based in Tuttlingen/ Baden-Württemberg, is a specialist for CNC controlled, vertical milling- and turning centres. The group is present worldwide with 2.100 employees in production- and development sites, sales- and service branches as well as commercial agents. Essential customer branches are the automotive industry, mechanical engineering, medical- and precision technology and aerospace.

For the new construction project of the headquarters of the enterprise a ventilation system was planned, which had to meet high expectations: The customer put special emphasis on a reliable and low-maintenance function of the system. That is why the roof installation had to be weather- and corrosion resistant – from the material of the ducts to the duct brackets as well as screws and other fasteners.

A constant tightness was another criteria plus a low-noise operation of the system, which had to be guaranteed by sound absorption lining at the fasteners. Three factors which predestine VENTAFLEX® for this job.

VENTAFLEX® solution

1. The corrosion-resistant GRP-material as well as the extensive, solid component parts of the VENTAFLEX® air ducts make a great weather resistance possible – ideal for a roof installation.
2. The smooth inner surface of the VENTAFLEX® ducts allow the requested low-maintenance and quiet operation: Starting points for adhesions or unnecessary air turbulences are thus as good as excluded.
3. In total 150 m ducts with a diameter from 420 to 1270 mm were installed.
4. A particular challenge were the customized connectors to the air conditioning systems. With the usual special attention to absolute tightness of the system 46 moulded parts were produced by the VENTAFLEX® specialists.



Advantages due to the VENTAFLEX® system

- + Reduction of the operating costs** – up to 40 % less energy loss, up to 10 % less pressure loss and up to 99 % less leakage loss
- + Special weather resistance** due to GRP-material
- + Individual adaption to the conditions** by customised production
- + Up to 70 % less weight** – important for statics and handling
- + Comfortable cleaning** of the smooth surface of the GRP-material
- + Transportation of great air volume** – due to big cross sections

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