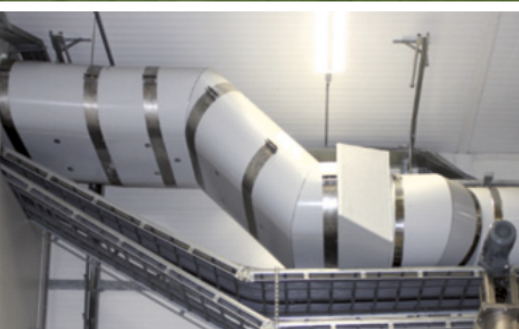


PRACTICE REPORT 23

Application examples for planners of complex construction projects



Wijster, NL: Application in the processing of animal remains

**Application area for VENTAFLEX®:
Air duct system with underground, in- and outdoor
installation for the reliable outlet of contaminated air.**

Cross-border project with challenging profile of requirements

Transport of 3.000 to 8.000 m³/h volume flow supply- and exhaust air
for a clean working environment

Task

A ventilation system should be installed in the new construction of a production hall of the Dutch company Noblesse Proteins, which meets the special challenges of meat processing. In the future valuable proteins are won from the sub- and rest products of poultry slaughterhouses mainly being processed for animal feed and fertilizers.

During production strict requirements for a hygienic working environment and environmental protection have to be considered. Moreover economical aspects play an important role at purchasing and when operating as well as the plan to install a part of the unit on top of the roof of the hall: The static has to be paid attention to, the ducts used here have to have the lowest possible weight.

VENTAFLEX® proved to be the perfect system for these challenging basic conditions of this construction project: Easy cleaning and high chemical resistance of the surfaces, economical operation by energy-saving insulation and long durability as well as light weight of the components were arguments, which no alternative duct was able to offer.

Practice comparison VENTAFLEX® insulated spiral duct

Requirements for an insulated air guidance system:
Length: 50 m
Series: 630
Insulation thickness: 5 cm
Δ t: 20 K

Therefore the following performance has to be applied:

VENTAFLEX® air duct: 900 W
other duct: 1.430 W

VENTAFLEX® solution

The used products:

VENTAFLEX® air duct, insulated in a length of 250 m with a diameter of 920 mm and in a length of 80 m with a diameter of 520 mm as well as a total of 70 molded- and special components. For this project nearly the complete range of supplies was made use of.

Advantages due to the VENTAFLEX® system

- + Certified hygiene conformity** of the ducts according to VDI 6022
- + Comfortable cleaning** of the smooth surface of the GRP-material
- + High chemical resistance** due to GRP-material
- + Individual adaption to the conditions** by customised production
- + Tested technology** – handling and installation are self explanatory, accordingly easy to delegate to local specialist companies
- + Up to 70 % less weight** – important for statics and handling and installation
- + Reduction of the operating costs** – up to 40 % less energy loss, up to 10 % less pressure loss and up to 99 % less leakage loss