

## **CHEESE PRODUCER IN THE BAVARIAN FOREST – VENTILATION SYSTEM FOR THE PRODUCTION**



**Air duct system with pipe dimensions of 920 mm, installation inside and outside the production hall**



**VENTAFLEX®**



MORE EFFICIENCY FOR AIR DUCT SYSTEMS



## Cheese producer in the Bavarian Forest – Ventilation system for production



### The task

- Maximum air flow volume under full load: 8,000 m<sup>3</sup>/h
- Air flow rate: 3.34 m/s
- Ducting length: approx. 250 m

**The products used: ISO 50 Industry duct system, insulated** Ø 730 mm, Ø 920 mm over 250 metres together with various moulded parts and special components. Material: extremely pure rigid foam, 35mm to 45 mm Inner and outer coating: GRP (glass fibre reinforced plastic)

### Practical comparison between VENTAFLEX® and fiberglass insulated spiral ducts

With an insulated air ducting system with the specifications

Length:	50 m
Model range:	630
Insulation thickness:	5 cm
Δ t:	20 K

Thus the following performance must be achieved:

**VENTAFLEX® :** 900 W  
**Third party piping:** 1.430 W

### Conclusion:

The VENTAFLEX® - System reduces ongoing operational costs and offers energy and cost savings of up to 40%.

### Introductory text

Installation had to be performed in the hall and on the roof while production was in progress. The

duct system had to meet the latest energy requirements. Hygiene-related requirements are no problem thanks to the extremely smooth GRP surface. The significantly lower price compared with

stainless steel pipes played a major role in the customer's decision in favour of the Ventaflex duct system.

The decision to use VENTAFLEX® was quickly reached thanks to our lamda value of 0.022 W/ mK (WLG 022), as illustrated in the practical comparison described below.

### The VENTAFLEX solution

The construction project included more than 200m of ducts with a diameter of 920 mm. Around 50 prefabricated 3m-long modules built by VENTAFLEX were used. The weight reduction compared with stainless steel pipes simplified installation in the interior.

A 3m module with a diameter of 920 mm weighs just 48 kg. The VENTAFLEX system is also easy to maintain when

it comes to cleaning the duct surfaces (inside and outside). Special components such as T-pieces with throttle valves and nozzle diffusers were also pre-assembled by VENTAFLEX.

All the ventilation ducts and moulded parts supplied by VENTAFLEX were joined using special adhesive and duct clamps. Suitable lengths can be achieved in the simplest manner direct on site

### Overview of benefits

- Up to 40 % less energy loss
- Up to 10 % less pressure loss
- Up to 60 % shorter installation times
- Up to 70 % less weight



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Further references at [www.ventaflex.de](http://www.ventaflex.de)

