VENTILATION SYSTEMS IN THE HYGIENE SECTOR



HYGIENE DUCTS FOR LARGE TECHNICAL VENTILATION PLANTS





Ideal for pure rooms

No chance for bacteria

In the food industry great demands are made on the ventilation, because the handling with food is submitted to special **hygienic requirements**. When planning new or changing over – e.g. because of **legal appointments** – we have developed innovative technical solutions which are also interesting for hospital environments, thanks to

their low-grade germ occurrence.

The method

For example the use of "Laminar-Flow" systems has stood the test in areas where "open" products are worked on. With this technology filtered air is specifically blown in over the facilities or products, which are to be protected, in order to make the guidance of unwanted particles, such as germs, spores and organisms, possible by calm and low-grade turbulence currents.

The VENTAFLEX®-solution

Especially in the food industry, the performence of our air ducts are advantageous. They meet the highest hygienic standards, especially by the germ repellent surfaces, the extensive avoidance of condensate by the extraordinary good insulation and the easy cleaning by the smooth and resistant GRP-surfaces.





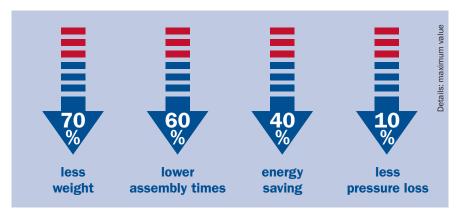
Features at a glance

- little deposit on GRP-surfaces
- germ repellent/ low-grade germs
- easy cleaning (inspection chamber/ robot)
- little condensate because of high insulation value
- little amount of care and maintenance
- GRP-surfaces are resistant againt cleaning agents

Areas of application:

- food industry
- meat-processing business
- backery business
- dairies
- breweries
- beverage manufacturers
- hospitals
- laboratories

Advantages of VENTAFLEX® air ducts



The investment in VENTAFLEX® air ducts is economically sustainable: the plants run more energy-efficient and with a lower-range maintenance than conventional systems. Of course we offer our customers an individual consulting service - we like to take responsibility for our product.

At this point the Berlin Institut for Air Hygiene confirms us with an "all-round certification".

Zertifikat

Hygiene – Konformitätsprüf

siehe Anlage

begebiet 3, 48612 Horstmar AFLEX Vertriet

2015, Institut für Lufthygiene, g. (FH) Jacob Kornack, V. Z ımen der Hygiene-Konfor

> 12, Blatt 1 (07/2011) A104-01 (04/2006)

13 Blatt 1 (02/2010) MH 6021 (09/2003) 13779 (09/2007)

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Support in project planning

The calculation with VENTAFLEX® adds up - this gives you free capacity for your budget. We would like to make a comparative offer to conventional insulated air duct systems. INSTITUT FÜR LUFTHYGIENE If you decide on VENTAFLEX®

we would like to help you to develop a ventilation concept specific to your project.



Certifications

VDI Richtlinie 6022 (D) SWKI VA104-01 (CH) DIN 1946-4 (D) **SWKI 99-3 (CH) ÖNORM H 6020 (AT)** VDI 3803 (D) **ÖNORM H 6021 (AT) DIN EN 13779 (EU)**

Hygiene – Konformitätsprüfung Gerades Stück - Luftkanal rund mit Verbir siehe Anlage 1 iselischaft mbH & Co. KG, Im Gewerbegebiet 3, 49612 Horstmar 16.12.2015, Institut für Lufthygiene, Kurfürstenstraße 131, 10785 Bartin Deutschland VENTAFLEX Vertriebsgesellschaft Gewerbegebiet 3, 48612 Horstmar perint, Deutschland Dipl. Ing. (FH) Jacob Kornack, V. Zügner M.Sc. iftraggeber | Herstelle Im Rahmen der Hygiene-Konformitätsprüfung wurde hygienerslevanten Anfordeungen der nachfolgend hygienerslevanten Anfordeungen: Prüfdatum |-ort ygienereievanien Androceinie narkierten Regelwerke geprüft: Prüfingenieur Prüfkriterien VDI 6022, Blatt 1 (07/20011)

SWKI VA104-01 (04/2006) SWKI VATUA-UT (U4/2/U0) VDI 3803 Blatt 1 (02/2010) ONORM H 6021 (09/2003) DIN EN 13779 (09/2007) komoninuar ues geprunen osran en Anforderungen der o. g. Regi Die Konformität des ge 5 Jahre: 12.2015 - 12.2020 HKP 08/14-04

ILH BERLIN

Beverage manufacturer Wörth on the Rhine: Roof fitting of a ventilation system

The manufacturer Pfälzer Erfrischungsgetränke GmbH (PEG) built a first-rate beverage production. About 1,5 Million cubic-metre water should be processed here annually.

A exact predetermined process air is mandatory for the production of PET bottles. All of this at economic costs und in due consideration of highest hygienic standards – a very complex project and a clear case for VENTAFLEX®.

The VENTAFLEX® -solution:

- The originally contemplated statics
 was able to be considerably slimmed,
 because our air ducts weigh 70 %
 less than conventional spiral ducts.
- Simplified elevation (wash concrete slab, elevation construction), a fixation through the roof panel was not necessary.
- 2,000 m² of VENTAFLEX® ducts were obstructed distributed on 10 ventilation lines of the dimension Ø 370-1270 mm.

Hospital Waldfriede in Berlin Zehlendorf: Air supply for pure rooms

The fitting of four air supply ducts for the supply of additional operating rooms was not allowed to be carried out in visual range – therefore it was relocated to the ground earth.

With other pipes existing in the ground, the VENTAFLEX® system was laid above with a leveling of the ground earth cover of about 80 cm. Because of the special characteristics of the material a most energy saving ventilation system came into being.

The VENTAFLEX® -solution:

- Due to the use of VENTAFLEX® air ducts a clear decrease of laying time was realised in comparison to conventional laying procedures in the ground earth area: two assembly operators did the work in three days.
- 70 m of VENTAFLEX® air ducts
 were obstructed with a diameter of
 370 as assembly groups of 3 m,
 20 curved parts in 90°, respectively
 45°, two wall ducts as well as a
 transition from round to square.

New construction of a production hall for food packaging

Clean rooms including material- and manlocks were planned and installed for one of the leading companies of the plastics industry producing plastic parts for medical engineering, laboratory supply and diagnostics as well as packaging for pharmaceutical produts and food.

An important planning aspect was the safeguarding against failure because every disturbance has an immediate effect on the production process. This is why the rooms were equipped with special plants, which on the one hand keep the temperature, humidity and space overpressure constant and on the other hand has a sufficient big power buffer available with which the required parameter can be maintained.

The VENTAFLEX® -solution:

- Realisation with VENTAFLEX® air ducts with a diameter of 580-1270 mm.
- Use of a number of customized formed components and assembly groups according to customer's specification.
- Consignmet and delivery of all construction parts according to drawing and assembly sequence planning.
- Hygienic characteristics of the air ducts and light weight were the determining factors for chosing a VENTAFLEX® system.



You can find more detailled practical reports on www.ventaflex.de