

# PRACTICE REPORT 63

Application examples for planners of complex construction projects



## Large-scale operation in Dortmund: cold air for fresh goods

**Application area for VENTAFLEX®:**  
Tailor-made air ducts supply food storage  
facilities with hygienically cooled fresh air

## A full-range food retailer brings the technology in its frozen food warehouse up to date

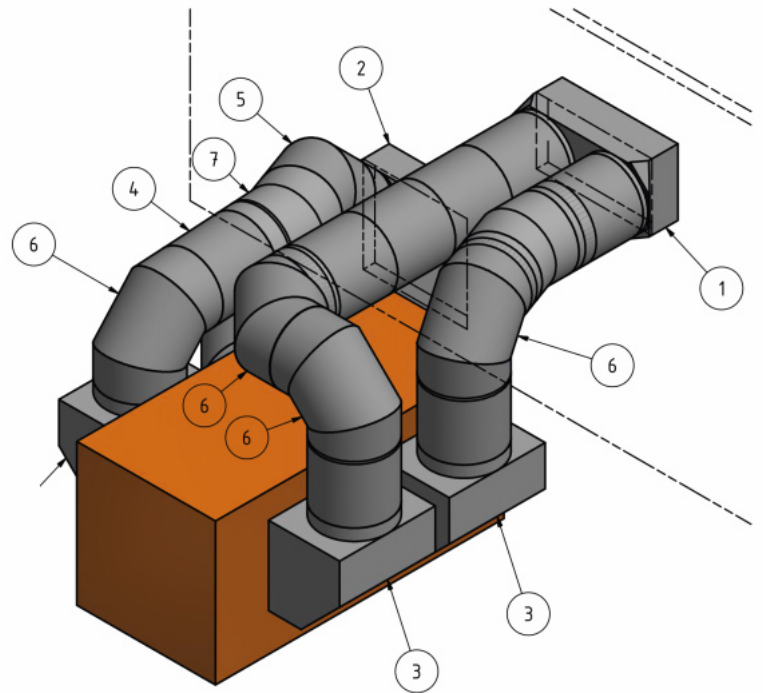
Thanks to individual components from VENTAFLEX®, existing 6 chillers will work even more cleanly and effectively in future

### Task

An application explicitly for refrigeration – and thus a job that documents the versatility of VENTAFLEX® air ducts. In a central food warehouse of a large retail chain, old ventilation ducts were replaced with energy-efficient air ducts from VENTAFLEX® that meet the hygiene requirements better.

A total of 24 connections were installed for 6 powerful cooling units, which distribute pre-cooled supply air in the warehouse via fans. It goes without saying that VENTAFLEX® products ensure reliably constant temperature control thanks to their tightness and insulation.

Another challenge here were the structural requirements, which were optimally utilized through precise planning, especially the use of existing wall break-throughs and the extremely limited space available for the ducts. Thanks to a full range 48 special components – some of them large in size – the system ultimately runs perfectly!



TEILELISTE			
OBJEKT	ANZAHL	BAUTEILNUMMER	BESCHREIBUNG
1	1	Anschluss Abluft TK Lager	
2	1	Übergang Zuluft	
3	3	Übergang RLT/Rohr	
4	10	101093004_Luftleitung 1090 1000 350	STEP AP242
5	1	451093004_Bogen 45° 1090 350	STEP AP242
6	5	901093004_Bogen 90° 1090 350	STEP AP242
7	2	20° 1090	
8	4	Rohr 1090 L-300	
9	1	Übergang Abluft Rohr	

### VENTAFLEX® -solution

- The connection from the appliance to the wall was created with the round air duct Classic ø 1090/30
- Large quantities of material were used: 48 special components, 100 m of air duct, 60 molded parts and 270 parts of supplies
- Transport was carried out with 10 truck deliveries
- Precise planning from dew point calculation to creation of exact installation drawings

### Advantages due to the VENTAFLEX® system

- + **Savings in operating costs** – up to 40 % less energy loss, up to 10 % less pressure loss and up to 99 % less leakage loss
- + **Certified hygiene conformity** of the ducts in accordance with VDI 6022
- + **Transport of particularly large air volumes** – thanks to large cross-sections
- + **Individual adaption to the conditions** by customized production

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More efficiency in air conduction