



AIR- DISTRIBUTOR

**System dimensions:
Ø650, Ø730, Ø820 and Ø920mm**

▷ **FLEXIBLE**
construction

▷ **HIGH-CLASS**
quality

▷ **MULTIFUNCTIONAL**
application

▷ **PATENTED**
mode of operation



The air distributor (AD) made by HSI Kunststofftechnik provides an even and steady fresh-air distribution in the livestock building. It is installed just below the building roof and leads the fresh air from the outside through the roof area inside the building. Here, the fresh air is subsequently delivered through the distributing disc and distributing ring.

MODE OF OPERATION

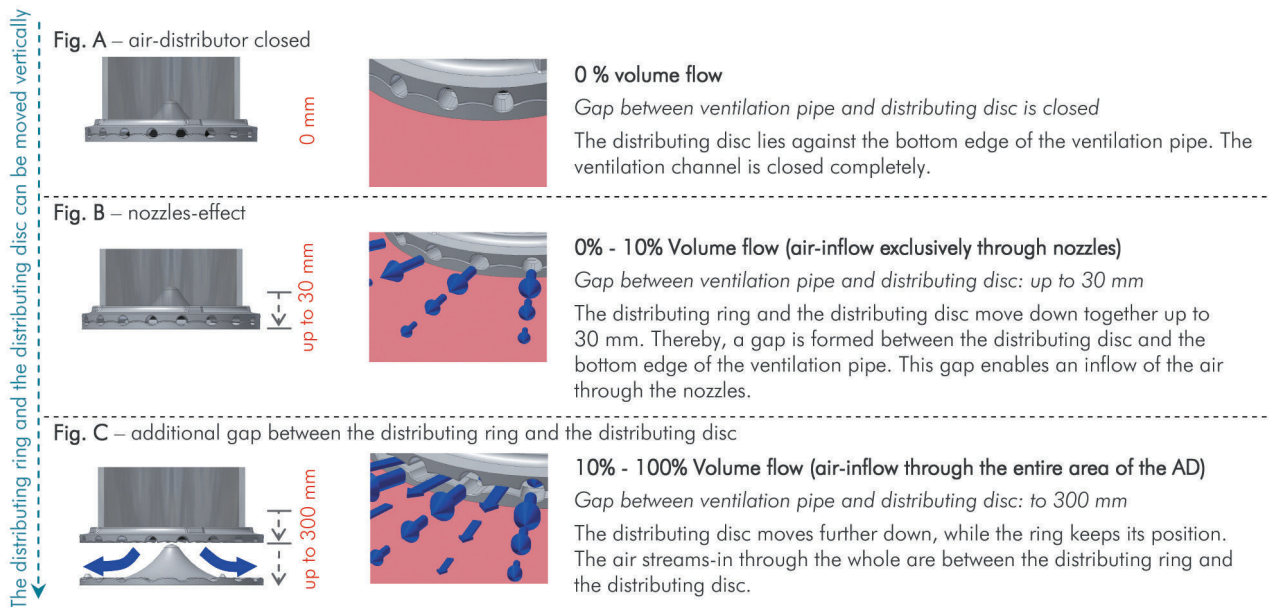


Mode of operation:

The elements of the air-distributor (AD) can be moved vertically by an actuator (Fig. A - C). By so doing, a gap is formed between the distributor elements and the ventilation pipe - the AD opens. By means of this opening degree, the AD-system performance is regulated. The performance varies depending on, for instance, the different climate conditions, or the occupancy of the livestock building.

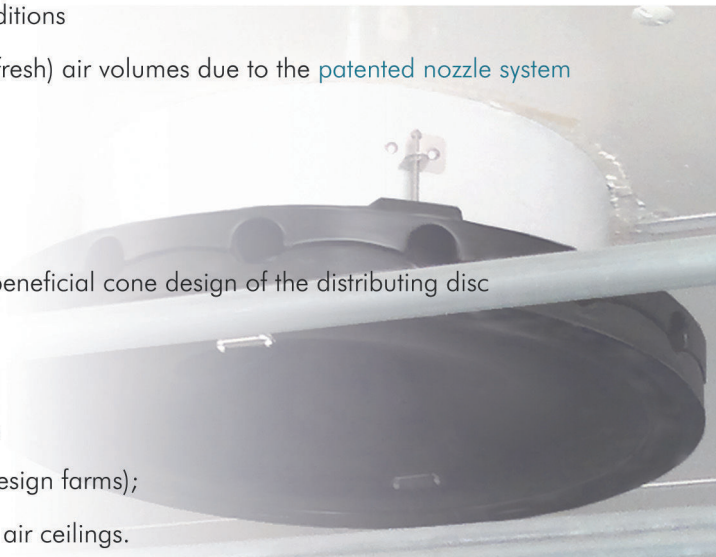
Due to the nozzles-effect (Fig. B), the patented system guarantees an excellent mixing of the incoming fresh air with the consisting building air, even at extremely cold weather conditions and low incoming air volumes.

With increasing air volumes, an additional gap is formed on the entire area between the distributing ring and the distributing disc, and the AD can let-in higher volumes of the incoming air while keeping its inlet velocity (Fig. C).



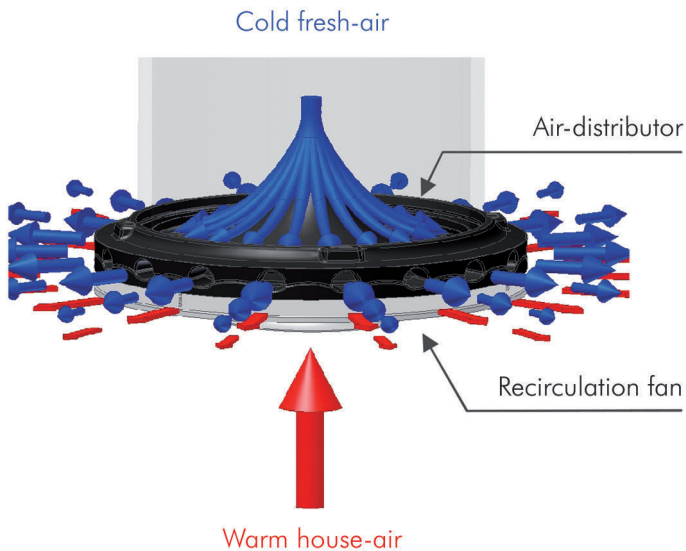
Advantages:

- Different system diameters: all-round application under diverse conditions
- uniformly continuous and precise fresh-air distribution even at low (fresh) air volumes due to the patented nozzle system
- usage possible in a pressure, balanced or vacuum ventilation
- actuation possible by means of a motor or a rope
- available with or without a recirculation fan
- only marginal friction losses thanks to the special aerodynamically beneficial cone design of the distributing disc
- perfectly suitable for usage in...
 - ...cold-climate regions;
 - ...building w/o intermediate ceilings or attic rooms (roof = ceiling);
 - ...buildings with structural limitations (e.g. block and mono-block design farms);
 - ...buildings that do not allow a fresh-air supply through air inlets or air ceilings.





WITH RECIRCULATION FAN



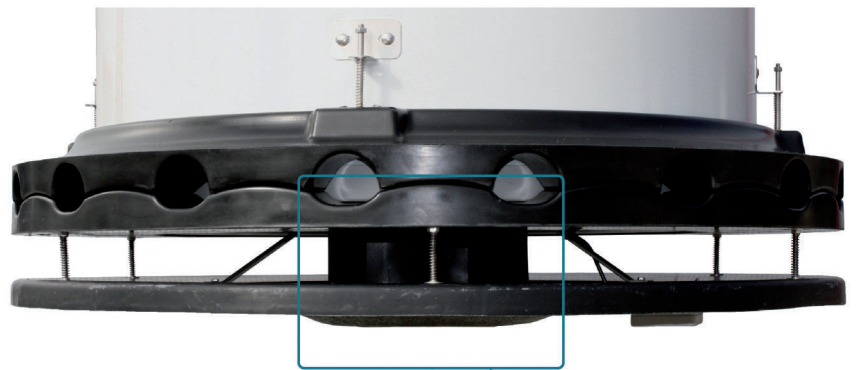
In particularly extreme climate zones, or with highly sensitive animal populations, it may be advantageous to additionally equip the air-distributor with a recirculation fan. This enables a more effective mixing of the cold fresh air with the warm house air, which is especially endeavoured in extremely cold winters.

Mode of operation:

The recirculation fan operates in a radial mode. It builds a supporting warm-air layer which absorbs the cold fresh air coming from the air-distributor.

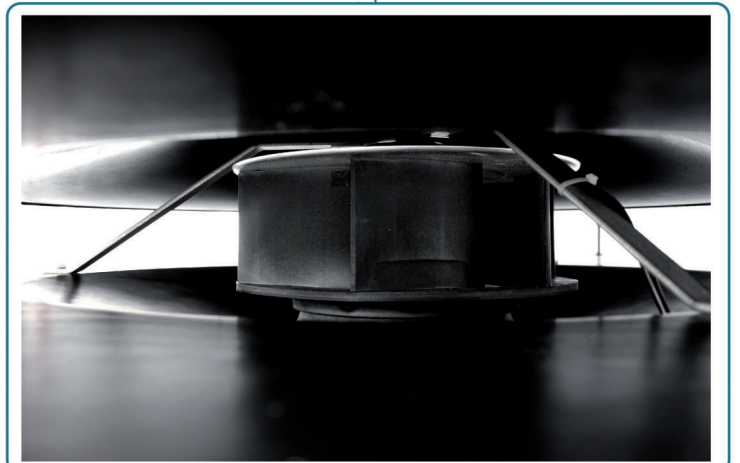
Thus, the cold fresh air is mixed with the warm house air and distributed optimally in the house.

The recirculation fan can be ordered directly with the air-distributor, or be retrofitted at any time.



Advantages of the air-distributor with recirculation fan:

- Recirculation fan can be ordered directly with the air-distributor, or be retrofitted at any time
- Recommendable in particularly extreme climate zones
- Advantageous in farrowing and growing sections, as young farrows are highly sensitive
- Perfect fresh-air supply for young animals in poultry farms
- Reduced drug expenses through healthier livestock
- Very low energy consumption (60-100 Watt / h)
- Largely reduced heating costs
- Good cleaning properties (hygiene!)





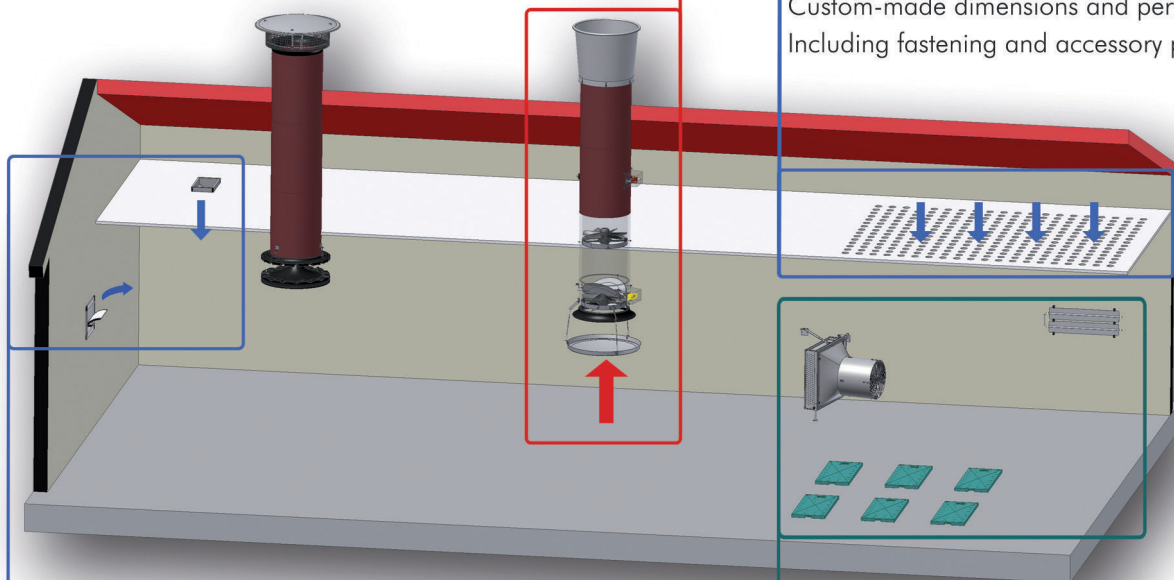
GET TO KNOW OUR FULL PRODUCT RANGE:

Exhaust-air pipe system

Ventilation pipe system for application in the exhaust-air extraction
 System dimensions: Ø370, Ø420, Ø470, Ø520, Ø580, Ø650, Ø730, Ø820, Ø920, Ø1000, Ø1130 and Ø1250 mm
 Including all fastening and accessory parts (diffuser, nozzles, roofing membrane, fan, drive system, water collecting basin, etc.)

Ventilation-ceiling system

Perforated ventilation sheets in the intermediate ceiling for uniform distribution of the fresh air
 Versions: Ventilation ceiling XPS
 Ventilation ceiling PVC/PS/PVC
 Ventilation ceiling "Trapeze" (GRP)
 Custom-made dimensions and perforation!
 Including fastening and accessory parts



Air-inlet system

Fresh-air inlets for quantity-controlled and aim-directed fresh-air supply
 Versions: for installation in wall or ceiling, with single or double flap
 Custom-made dimensions!
 Actuation by motor drive or manual drive

Heating systems

for uniform and pleasing distribution of warmth
 TWIN-PIPE HEATER
 - made from anodised aluminium,
 - high heat output (230 Watt /run.m.)
 HEATING PLATES FOR FARROW NESTS
 - various types
 - extensive dimensions range
 FINNED HEAT EXCHANGER
 - stainless steel
 - various models

HSI Kunststofftechnik GmbH

Steinfurter Str. 22

D-48624 Schöppingen

T.: +49 (0) 25 55 99 709 0

F.: +49 (0) 25 55 99 709 0

info@hsi-kunststofftechnik.de

www.hsi-kunststofftechnik.de