





SYSTEM COOL-X

The cooling element «Cool-X» is an ideal supplementation to the fresh-air system in buildings which are placed in particularly hot regions. Here, the hot outside air is cooled by the «Cooling Pads» and conducted inside the building afterwards.

Advantages:

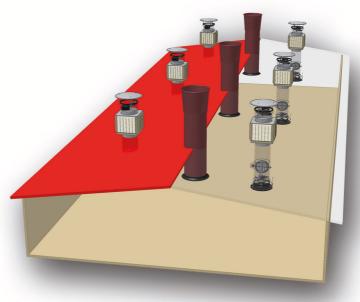
- Ecologically friendly: water as cooling medium
- Applicable with any ventilation type
- Low power and water consumption
- Installation possible in walls and roofs
- Low maintenance and noise level

Furthermore:

- Stable milk production and constant growth in summer
- Lower losses in heat-waves
- Improvement of the conditions for breeding and finishing
- No irritation of skin, eyes and the respiratory tract

Application in agricultural and industry buildings:

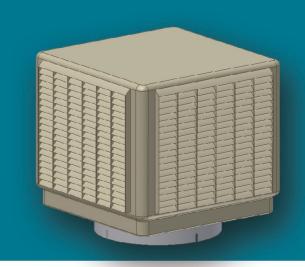
- Poultry buildings
- Piggery, incl. breeding and finishing
- Milking parlour buildings
- Slaughterhouses
- Greenhouses
- Vegetable and fruit stocks





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Technical characteristics:

	Cool-X 18.000	Cool-X 29.000
Performance	up to 18.000m³/h	up to 39.000m³/h
Flow direction	axial	axial
Voltage	230/380V	230/380V
Frequency	50/60Hz	50/60Hz
Motor power	0,75kW	1,25kW
Amperage	230V / 4,1A	400V / 1,4A
Water consumption	10-15l/h	25-30l/h
Dimensions	1100 x 1100mm	1470 x 1360mm
Dimensions air-outlet	670 x 670mm	800 x 800mm
Noise	≤78Db (A)	≤78Db (A)
Net weight	65kg	150kg

100-150m²

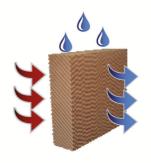
Effective area

200-250m²

Mode of operation:

The working principle of the «Cool-X» is based on the natural phenomenon of water evaporation by means of heat energy. The water is pumped in a spraying circulation which spreads it evenly on the lamellae of the cooling pad.

A fan inside the ventilation pipe produces low-pressure within the cooling element, so that the hot outside air is lead inside the element by passing the cooling pads.



The fine water film on the cooling pads absorbs the heat of the outside air and evaporates (see fig. on the left).

Here, the degree of temperature drop rises with the temperature of the outside air (see table below).

That way, during the heat-wave phase, the «Cool-X» guarantees both a steady fresh-air supply and its continuous cooling. In addition, the supplied fresh-air volumes can be easily regulated!

	Weather												
	sunny	sunny	cloudy	sunny	sunny	sunny	sunny	sunny	sunny	cloudy	cloudy	sunny	cloudy
Outside temperature	40	39	37	36	35	35	34	33	32	32	31	28	28
Inside temperature	26	27	28	28	27	29	28	28	25	27	27	24	25
Temperature difference	14	12	9	8	8	6	6	5	7	5	4	4	3
Humidity	33%	40%	51%	55%	54%	60%	64%	70%	62%	68%	79%	68%	85%

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