



OPTIMAL DISTRIBUTION!

Multiple steam distribution system
Condair **OptiSorp**



Humidification and evaporative cooling

 **condair**

SHORTEST HUMIDIFICATION DISTANCES THROUGH HOMOGENEOUS STEAM DISTRIBUTION

Patented main-flow nozzles facilitate condensate-free steam discharge

Main-flow nozzles remove steam from the middle of the distribution pipes where it is hot and condensate-free. This ensures that the air hoses behind the distribution system remain dry.



The nozzles are made of solid stainless steel. They work reliably, are long-lasting and resistant to aging, and do not leak.

Flexible and accurately fitted

OptiSorp systems are individually calculated and adapted to existing cross-sections. Pre-assembled in the factory, they are delivered to the mounting location ready for connection. There the distribution systems can be quickly installed with minimum assembly work.



Uniform humidity profile through optimal distribution

The structural design of the distribution system allows for precise and homogeneous steam discharge over the entire



cross-section surface. Humidity layering that happens over the flow cross-section is effectively counteracted. The injected steam is quickly and evenly absorbed by the air current.

The steam distribution system is made of solid stainless steel.

This makes it resistant to the effects of temperature and aging. All pipe connections remain continuously watertight and fault-free even after long operation.

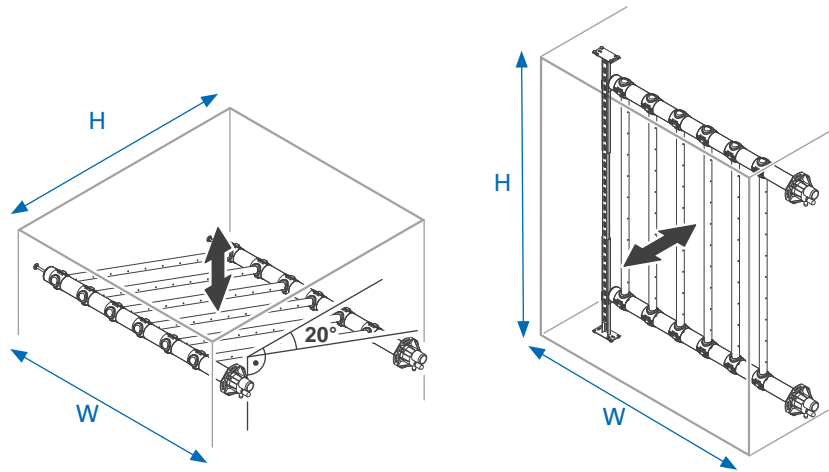


TABLE OF OUTPUTS

| OptiSorp | Steam connections | Steam release | Duct dimensions | |
|----------|-------------------|---------------|-----------------|-----------|
| | Quantity | in kg/h | W in mm | H in mm |
| System 1 | 1 | max. 45 | 450-2,700 | 450-1,650 |
| System 2 | 2 | max. 90 | 450-2,700 | 450-2,200 |
| System 3 | 3 | max. 135 | 450-2,700 | 800-3,200 |
| System 4 | 4 | max. 180 | 450-2,700 | 800-3,200 |

LENGTH OF HUMIDIFICATION DISTANCE (B_N in m)

| Inlet moisture (% rel. hum.) | Outlet moisture (% rel. hum.) | | | | | |
|---------------------------------|-------------------------------|------|------|------|------|------|
| | 40 | 50 | 60 | 70 | 80 | 90 |
| 5 | 0.22 | 0.28 | 0.36 | 0.48 | 0.66 | 1.08 |
| 10 | 0.20 | 0.26 | 0.34 | 0.45 | 0.64 | 1.04 |
| 20 | 0.16 | 0.22 | 0.30 | 0.41 | 0.58 | 0.96 |
| 30 | 0.10 | 0.17 | 0.25 | 0.36 | 0.52 | 0.88 |
| 40 | | 0.11 | 0.20 | 0.30 | 0.45 | 0.79 |
| 50 | | | 0.13 | 0.24 | 0.38 | 0.69 |
| 60 | | | | 0.16 | 0.30 | 0.58 |
| 70 | | | | | 0.20 | 0.45 |

Tabular overview of expected humidification distances When the specified applications are individually calculated, this usually results in further improved values which are guaranteed.