OPTIMAL DISTRIBUTION!

Multiple steam distribution system Condair OptiSorp





Humidification and evaporative cooling

SHORTEST HUMIDIFICATION DISTANCES THROUGH HOMOGENEOUS STEAM DISTRIBUTION



Short humidification distances are decisive factors when it is about reliable and hygienic steam humidification. In air conditioning

systems there must be no vapor in air pipe installations. Damp surfaces, corrosion and hygienic risks would be the consequence. With the Condair OptiSorp steam distribution system the humidification distances can be

Condair OptiSorp

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.

reduced significantly compared to conventional distribution systems. It allows steam injection even in difficult installation conditions and even then guarantees optimal distribution and the best moisture absorption.



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.

Condair GmbH

Regional Centre South Parkring 4 D-85748 Garching Phone +49 (0) 89 / 20 70 08-0

Regional Centre South-West Zettachring 6 D-70567 Stuttgart Phone +49 (0) 711 / 25 29 70-0

Regional Centre Central Nordendstraße 2 D-64546 Mörfelden-Walldorf Phone +49 (0) 61 05 / 963 88-0

Regional Centre West Münsterstraße 246 D-40470 Düsseldorf Phone +49 (0) 211 / 54 20 35-0

Regional Centre North Lüneburger Strasse 4 D-30880 Laatzen - Rethen Phone +49 (0) 511 / 51 54 13 11

Regional Centre East Chausseestrasse 88 D-10115 Berlin Phone +49 (0) 30 / 921 03 44-0

Condair Austria Perfektastrasse 45 A-1230 Vienna Phone +43 (0) 1 / 60 33 111-0

