HANKISON

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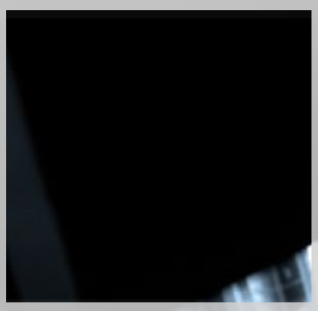
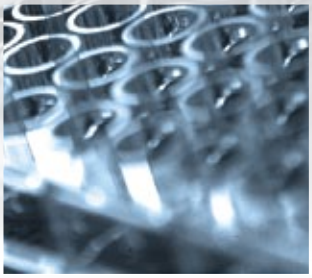




MEMBRANE COMPRESSED AIR DRYERS

HMD SERIES

HANKISON
AN SPX BRAND

THE NEXT GENERATION IN MEMBRANE TECHNOLOGY
HMD SERIES MEMBRANE DRYERS

Advancements in design allow membrane technology to effficiently dehydrate compressed air. Versatile, environmentally and user-friendly, membrane dryers are the ideal solution for low flow and point of use applications.

Versatile

- Lightweight—can be installed without additional support
- Operates in both horizontal and vertical orientation
- Convenient mounting systems available
- High inlet and outlet flows
- Dryers may be sized to produce dew point temperatures from -40°F (-40°C) or below to +50°F (+10°C)

Efficient

- Low sweep air rates — more air available downstream
- Choice of Prefilter packages:
  - » HF Series Grade 5 high efficiency oil removal filter for normal applications
  - » HF Series Grade 7 air linet filter and Grade 3 ultra high efficiency oil removal filter for critical applications

Low Maintenance

- No power source required
- No moving parts to maintain, repair or wear out
- No consumables to replace
- No liquid condensate to dispose of

Drying Protection

- Pressurized air is contained inside the membranes
- Housing contains air at atmospheric pressure
- No oil/water emulsions or chemicals to dispose of

Durable Construction

- Maximum working pressure for all models: 175 psig (12.3 kg/cm^2)
- Maximum inlet temperature: 150°F (66°C)

3 Year Warranty

Standard one year warranty is extended to three years when the dryer is installed with an optional prefilter package. To keep the warranty in effect, cartridges must be replaced at six month intervals and the drain mechanism yearly.

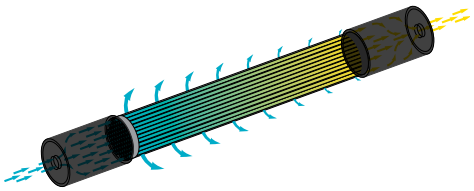
**Fitness Guarantee*

If during the first three months of operation, you are not satisfied with the suitability of the membrane dryer for your application, return the dryer for full credit. The credit can be applied to the purchase of any other Hankison drying equipment.

HMD SERIES SPECIFICATIONS

HOW IT WORKS

Compressed air, saturated with water vapor, flows through a bundle of tube-shaped hollow membrane fibers. A sweep orifice installed at the end of the bundle meters the amount of sweep air required to remove the water vapor from the dryer. Dry air then exits the tube bundle for use downstream. As long as the dried air isn't exposed to temperatures below the specified pressure dew point, no troublesome liquid water will form in the air system.



Inlet/Outlet Flow Capacities *[scfm (nm³/h)] @ 100 psig (kg/cm²)³*

	Inlet Temp		Flow	Outlet Pressure Dew Point °F (°C)					
				50	40	20	0	-20	-40
	°F	°C		10	4.4	-6.7	-17.8	-29	-40
HMD20-1	40	4.4	In				1.57	1.13	0.85
			Out				1.36	0.92	0.64
	60	16	In			1.73	1.24	0.94	0.72
			Out			1.52	1.03	0.73	0.51
	80	27	In		1.88	1.37	1.04	0.81	0.63
			Out		1.67	1.16	0.83	0.60	0.42
	100	38	In	1.70	1.48	1.14	0.89	0.70	0.55
			Out	1.49	1.27	0.93	0.68	0.49	0.34
	120	49	In	1.39	1.24	0.99	0.79	0.62	0.49
			Out	1.18	1.03	0.78	0.58	0.41	0.28
	150	66	In	1.11	1.01	0.82	0.67	0.53	0.43
			Out	0.90	0.80	0.61	0.46	0.32	0.22
HMD20-2	40	4.4	In				6.04	4.32	3.22
			Out				5.22	3.50	2.40
	60	16	In			6.68	4.76	3.58	2.73
			Out			5.86	3.94	2.76	1.91
	80	27	In		7.27	5.24	3.96	3.05	2.36
			Out		6.45	4.42	3.14	2.23	1.54
	100	38	In	6.55	5.69	4.37	3.40	2.66	2.08
			Out	5.73	4.87	3.55	2.58	1.84	1.26
	120	49	In	5.33	4.76	3.77	2.98	2.36	1.86
			Out	4.51	3.94	2.95	2.16	1.54	1.04
	150	66	In	4.25	3.86	3.13	2.51	2.01	1.60
			Out	3.43	3.04	2.31	1.69	1.19	0.78
HMD20-3	40	4.4	In				9.51	7.17	5.62
			Out				8.31	5.97	4.42
	60	16	In			10.36	7.78	6.14	4.90
			Out			9.16	6.58	4.94	3.70
	80	27	In		11.17	8.43	6.67	5.39	4.35
			Out		9.97	7.23	5.47	4.19	3.15
	100	38	In	10.19	9.04	7.24	5.88	4.81	3.92
			Out	8.99	7.84	6.04	4.68	3.61	2.72
	120	49	In	8.55	7.77	6.40	5.28	4.35	3.57
			Out	7.35	6.57	5.20	4.08	3.15	2.37
	150	66	In	7.08	6.53	5.49	4.59	3.81	3.15
			Out	5.88	5.33	4.29	3.39	2.61	1.95
HMD20-4	40	4.4	In				20.5	15.9	12.8
			Out				18.0	13.4	10.3
	60	16	In			22.2	17.1	13.8	11.3
			Out			19.7	14.6	11.3	8.8
	80	27	In		23.8	18.3	14.9	12.3	10.2
			Out		21.3	15.8	12.4	9.8	7.7
	100	38	In	21.8	19.5	16.0	13.3	11.1	9.3
			Out	19.3	17.0	13.5	10.8	8.6	6.8
	120	49	In	18.6	17.0	14.3	12.1	10.2	8.6
			Out	16.1	14.5	11.8	9.6	7.7	6.1
	150	66	In	15.7	14.6	12.5	10.7	9.1	7.7
			Out	13.2	12.1	10.0	8.2	6.6	5.2
HMD20-5	40	4.4	In				34.0	26.2	20.9
			Out				29.8	22.0	16.7
	60	16	In			36.9	28.2	22.6	18.4
			Out			32.7	24.0	18.4	14.2
	80	27	In		39.7	30.4	24.5	20.1	16.5
			Out		35.5	26.2	20.3	15.9	12.3
	100	38	In	36.3	32.4	26.4	21.8	18.1	15.0
			Out	32.1	28.2	22.2	17.6	13.9	10.8
	120	49	In	30.8	28.2	23.6	19.7	16.5	13.7
			Out	26.6	24.0	19.4	15.5	12.3	9.5
	150	66	In	25.8	24.0	20.5	17.3	14.6	12.2
			Out	21.6	19.8	16.3	13.1	10.4	8.0
HMD20-6	40	4.4	In				66.4	51.0	40.7
			Out				58.2	42.8	32.5
	60	16	In			72.0	55.0	44.1	35.8
			Out			63.8	46.8	35.9	27.6
	80	27	In		77.4	59.3	47.7	39.1	32.1
			Out		69.2	51.1	39.5	30.9	23.9
	100	38	In	70.8	63.3	51.4	42.4	35.2	29.1
			Out	62.6	55.1	43.2	34.2	27.0	20.9
	120	49	In	60.1	54.9	45.9	38.4	32.1	26.7
			Out	51.9	46.7	37.7	30.2	23.9	18.5
	150	66	In	50.3	46.7	39.8	33.7	28.4	23.8
			Out	42.1	38.5	31.6	25.5	20.2	15.6

Larger models available see note 2

	Inlet Temp		Flow	Outlet Pressure Dew Point °F (°C)				
				40	20	0	-20	-40
	°F	°C		4.4	-6.7	-17.8	-29	-40
RHD016SS	40	4.4	In		27.7	17.1	13.1	10.9
			Out		24.3	13.7	9.7	7.5
	60	16	In	28.8	18.7	14.1	11.7	10.1
			Out	25.4	15.3	10.7	8.3	6.7
	80	27	In	20.4	15.1	12.4	10.7	9.5
			Out	17.0	11.8	9.0	7.3	6.1
	100	38	In	16.3	13.3	11.3	10.0	9.0
			Out	12.9	9.9	7.9	6.6	5.6
	120	49	In	14.2	12.1	10.6	9.5	8.6
			Out	10.8	8.7	7.2	6.1	5.2
RHD026SS	40	4.4	In		47.0	29.0	22.2	18.5
			Out		41.3	23.3	16.5	12.8
	60	16	In	48.9	31.7	23.9	19.8	17.1
			Out	43.2	26.0	18.2	14.1	11.4
	80	27	In	34.6	25.8	21.0	18.1	16.1
			Out	28.9	20.1	15.3	12.4	10.4
	100	38	In	27.6	22.5	19.1	16.9	15.2
			Out	21.9	16.8	13.4	11.2	9.5
	120	49	In	24.1	20.5	17.9	16.1	14.5
			Out	18.4	14.8	12.2	10.4	8.8
RHD052SS	40	4.4	In		94.0	58.0	44.4	37.0
			Out		82.6	48.6	33.0	25.6
	60	16	In	97.8	63.4	47.8	39.6	34.2
			Out	86.4	52.0	36.4	28.2	22.8
	80	27	In	69.2	51.6	42.0	36.0	32.2
			Out	57.8	40.2	30.6	24.8	20.8
	100	38	In	55.2	45.0	38.2	33.8	30.4
			Out	43.8	33.6	26.8	22.4	19.0
	120	49	In	48.2	41.0	35.8	32.2	29.0
			Out	36.8	29.6	24.4	20.8	17.6

1 *Use inlet air temperature if the air entering the dryer has not been dried upstream (air is saturated). If air has been dried. (e.g. in a refrigerated dryer) use the dew point temperature of the inlet air.*

2 *Models HMD20-7, 8, and 9 for higher flows are available. Model HMD20-7 is three HMD20-5s piped in parallel. Multiply flows found in HMD20-5 table by 3 to determine capacity.*
Model HMD20-8 is two HMD20-6s, and HMD20-9 is three HMD20-6s piped in parallel. Multiply flows in HMD20-6 table by 2 or 3 to find flow capacity.

3 *Flow capacities at 100 psig (7 kg/cm²). For capacities at other pressures consult factory. Capacities are established in accordance with CAGI (Compressed Air and Gas Institute) Standard ADF 700: Membrane Compressed Air Dryers - Methods for Testing and Rating.*

HMD Series Product Specifications

Model	Dimensions L in	L mm	W in	W mm	In/Out Conn.² in	In/Out Conn.² mm	Weight lb	Weight kg	Max. Working Pressure	Max. Operating Temp.
HMD20-1	12.3	312	2.5	63.5	0.4	10.2	1.3	0.6		
HMD20-2	26.4	671	2.5	63.5	0.4	10.2	1.8	0.8		
HMD20-3	15.3	389	4.2	106.7	0.4	10.2	4.9	2.2		
HMD20-4	26.9	683	4.2	106.7	0.5	12.7	6.9	3.1		
HMD20-5	41.0	1,041	4.2	106.7	0.5	12.7	9.5	4.3		
HMD20-6	41.1	1,044	5.3	134.6	0.8	20.3	14.6	6.6	175 psig	150°F
HMD20-7[1]	52.0	1,321	19.3	490.0	1.0	25.4	30.0	13.6	(12.3 kg/cm²)	(66°C)
HMD20-8[1]	52.0	1,321	12.0	305.0	1.0	25.4	30.7	13.9		
HMD20-9[1]	52.0	1,321	21.5	546.0	1.0	25.4	45.0	20.4		
RHD016SS	26.9	683	4.2	106.7	0.5	12.7	6.9	3.1		
RHD026SS	41.0	1,041	4.2	106.7	0.5	12.7	9.5	4.3		
RHD052SS	41.1	1,044	5.3	134.6	0.8	20.3	14.6	6.6		

1 *See Note 2 above*

2 *Specify NPT or BSP*

MATERIALS OF CONSTRUCTION

Models	End Caps	Shell	Inlet/Outlet Fittings
HMD20-1 through HMD20-5	Nylon	CPVC	Brass
HMD20-6	Aluminum	CPVC	Aluminum*
HMD20-4SS through HMD20-6SS	304SS	304SS	304SS*

**Integral to end caps*

HANKISON
AN SPX BRAND

Hankison has built a global reputation for manufacturing quality compressed air treatment solutions. For over half a century Hankison has provided customers in the compressed air industry with the latest technology to produce superior results.

Hankison is dedicated to pursue the best solution in an expanding marketplace to manufacture new products that meet customer's performance, quality and energy savings requirements. We will continue to excel by providing the best service, sales support, and products to bring value to our customers.

OUR GLOBAL NETWORK

North America

SALES, SERVICE AND ADMINISTRATION

HANKISON
1000 PHILADELPHIA STREET
CANONSBURG, PA 15317-1700 USA
TEL | 724 | 745 | 1555 FAX | 724 | 745 | 6040

SPX RentalDryers.com

9029 GOVERNORS ROW
DALLAS, TX 75247 U.S.A.
TEL | 214 | 905 | 9734 FAX | 214 | 905 | 1282

Canada

1415 CALIFORNIA AVENUE
BROCKVILLE, ON, CANADA, K6V 7H7
TEL | 800 | 267 | 3884
FAX | 613 | 345 | 7240

Mexico and Central/South America

HANKISON DE MÉXICO, S. DE R. L. DE C. V.
AVENIDA CONSTITUCION #2165 -B
COLONIA JULIAN CARRILLO
SAN LUIS POTOSÍ, S.L.P.
C.P. 78250 MÉXICO
TEL | +52 | (444) | 815 | 7974 FAX | +52 | (444) | 815 | 8295

Europe

HANKISON GMBH
KONRAD-ZUSE-STR. 25
D-47445 MOERS GERMANY
TEL | +49 | 2841 | 8190 FAX | +49 | 2841 | 87112

Asia

SPX DEHYDRATION & FILTRATION CHINA
5TH FLOOR, PARK CENTER,
NO.1568 HUASHAN ROAD, SHANGHAI CHINA
TEL | +86 | 021 | 2208 | 5840 FAX | +86 | 021 | 2208 | 5866

HANKISON, AN SPX BRAND
1000 PHILADELPHIA STREET
CANONSBURG, PA 15317-1700 U.S.A.
TEL | 724 | 745 | 1555 FAX | 724 | 745 | 6040
Email: hankison.sales@spx.com
www.hankisonintl.com

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Bulletin HMD-NA_2