DEHUMIDIFIER

DRYER ADSORPTION ROTOR DEHUMIDIFIER

DM1 SERIES

Dryer • overall solution service provider in the field of air treatment

PRODUCT PROFILE

With the characteristics of ultra-high dehumidification efficiency and long service life and so on, the DM1 model rotor dehumidifier is suitable for occasions that require high air humidity, the humidity and environment of the production process can be precisely and automatically controlled by the machine.

DM1Type(RL Series) of Dehumidifier Specifications

Type	Processing Air			Reactivation Air			Reactivation Heating		Max consumption		Noise (max) (dBA)	Weight	
	Volume (m³/h)	External Pressure (pa)	Fan Power (kw)	Volume (m³/h)	External Pressure (pa)	Fan Power (kw)	Electric Power (kw)	Stram Volume (kg/h)	Electric (kw)	Steam (kw)		Electric (kg)	Steam (kg)
DM1-5000	5000	450	2.20	1750	400	1.50	55.8	94.1	59.6	3.8	69	780	750
DM1-6000	6000	400	3.00	2050	300	1.50	65.1	109.4	69.7	4.6	69	800	780
DM1-7200	7200	350	3.00	2350	350	1.50	74.4	126.4	79.0	4.6	72	900	860
DM1-9000	9000	500	4.00	3000	400	2.20	93.0	160.6	99.3	6.3	75	1050	1000
DM1-10000	10000	450	5.50	3200	350	2.20	102.3	170.9	110.1	7.8	75	1100	1050
DM1-12000	12000	400	5.50	3850	300	2.20	120.9	205.0	128.7	7.8	77	1250	1200
DM1-15000	15000	450	7.50	5050	500	4.00	154.2	261.4	165.8	11.6	78	1350	1350
DM1-18000	18000	400	7.50	5850	400	4.00	186.0	276.8	197.6	11.6	80	1600	1600
DM1-21000	21000	450	11.00	7000	450	5.50	213.9	374.2	230.5	16.6	80	1800	1750
DM1-23500	23500	400	11.00	7850	350	5.50	241.8	420.3	258.4	16.6	82	1900	1860
DM1-25000	25000	400	11.00	8400	300	5.50	260.4	449.4	277.0	16.6	82	1950	1900
DM1-30000	30000	350	15.00	10000	280	5.50	306.9	534.8	327.5	20.6	83	2100	2050

- Figures above is based on air density at 1.2 kg/m³
- Steam consumption is based on 2106.9kj/kg and 0.5MPa
- Electric power assumes 380V and 50Hz
- The RL model is an adsorption rotor dehumidifier, which is used alone.

DM1Type(RL Series) of Dehumidifier Specifications

Type	Processing Air Vol (m³/h)	Reactivation Air			Reactivation Heating		Max consumption		Noise (max) (dBA)	Weight	
		Volume (m³/h)	External Pressure (pa)	Fan Power (kw)	Electric Power (kw)	Stram Volume (kg/h)	Electric (kw)	Steam (kw)		Electric (kg)	Steam (kg)
DM1-5000	5000	1750	400	1.50	55.8	94.0	57.4	1.6	69	715	685
DM1-6000	6000	2050	300	1.50	65.1	109.4	66.7	1.6	69	735	715
DM1-7200	7200	2350	350	1.50	74.4	126.4	76.0	1.6	72	820	780

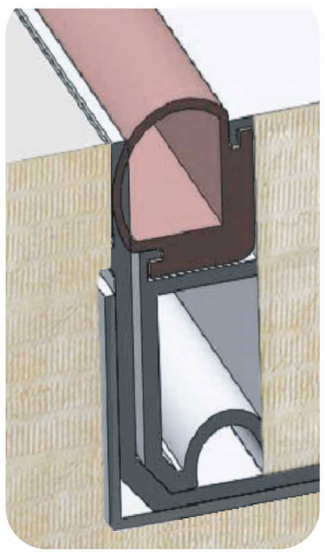
- Figures above is based on air density at 1.2 kg/m³
- Steam consumption is based on 2106.9kj/kg and 0.5MPa
- Electric power assumes 380V and 50Hz
- The TTS model is an adsorption rotor dehumidifier that is used only with air conditioning boxes.

Flexible options for regeneration

Adopting solid-state breakers silicon controlled, graded regenerative electric (steam) heating can accurately control the stability of the heating temperature. With high temperature safety protection device, the regenerative heating not only operates reliably, but also can reasonably save energy. DM1 model dehumidifiers have a variety of regeneration methods, customers can choose according to their own conditions, such as electric heating, steam heating, natural gas direct heating, fuel oil heating and so on.

High-quality equipment frame structure

Using the latest patented technology - double-layer anti-cold bridge frame structure (inside and outside), the frame material of the equipment is a high-strength (ALUZINK) profiles, the middle of it adopts high-efficient RPVC adiabatic insulation body to ensure the overall strength of the equipment, and at the same time, a substantial reduction in energy loss. The surface adopts advanced galvanized treatment and plastic spraying process, so the equipment has good corrosion resistance and insulation, the overall beauty and mechanical strength of the equipment are guaranteed, the sealing of the equipment is improved, and at the same time, it is beneficial to the overall connection between the dehumidifier and the front and rear air conditioning boxes.



Reasonable control methods

With flexible and convenient control mode, customers can choose DDC or PLC controller according to their own needs, and the controller is equipped with touch screen and configuration monitoring software. For different process requirements, the unit can manually, automatically or remotely control the DDC or PLC, so as to precisely control the temperature and humidity.

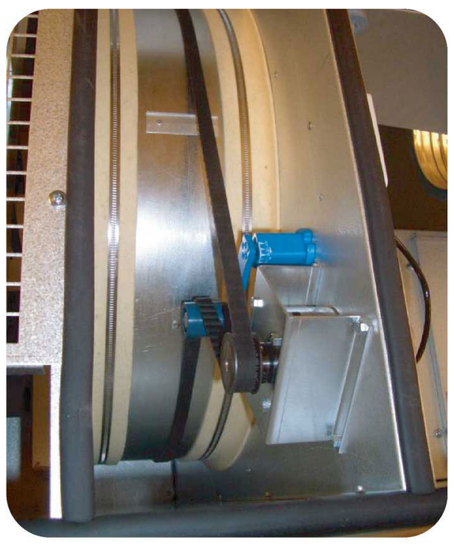
Anti-Cold Bridge Double-layer Equipment Panels

Using the latest patented technology andanti-cold bridge double-layer equipmen panels with PE, PVC mixing skeleton, the panel is a metal sheet, coated with anti-corrosion organic film layer (hot-dipgalvanized inside), and the mezzanine is filled with polyurethane foam. Good noise reduction and insulation properties, the external environment of all kinds of harsh effects can be resisted (far better thanstandard metal panels), has a significant energy-saving effect.The standards adopted are lSO9001,EN10147+A1,EN1886, ENISO3744,ISO,111546-2, etc.

Built-in Air Filter

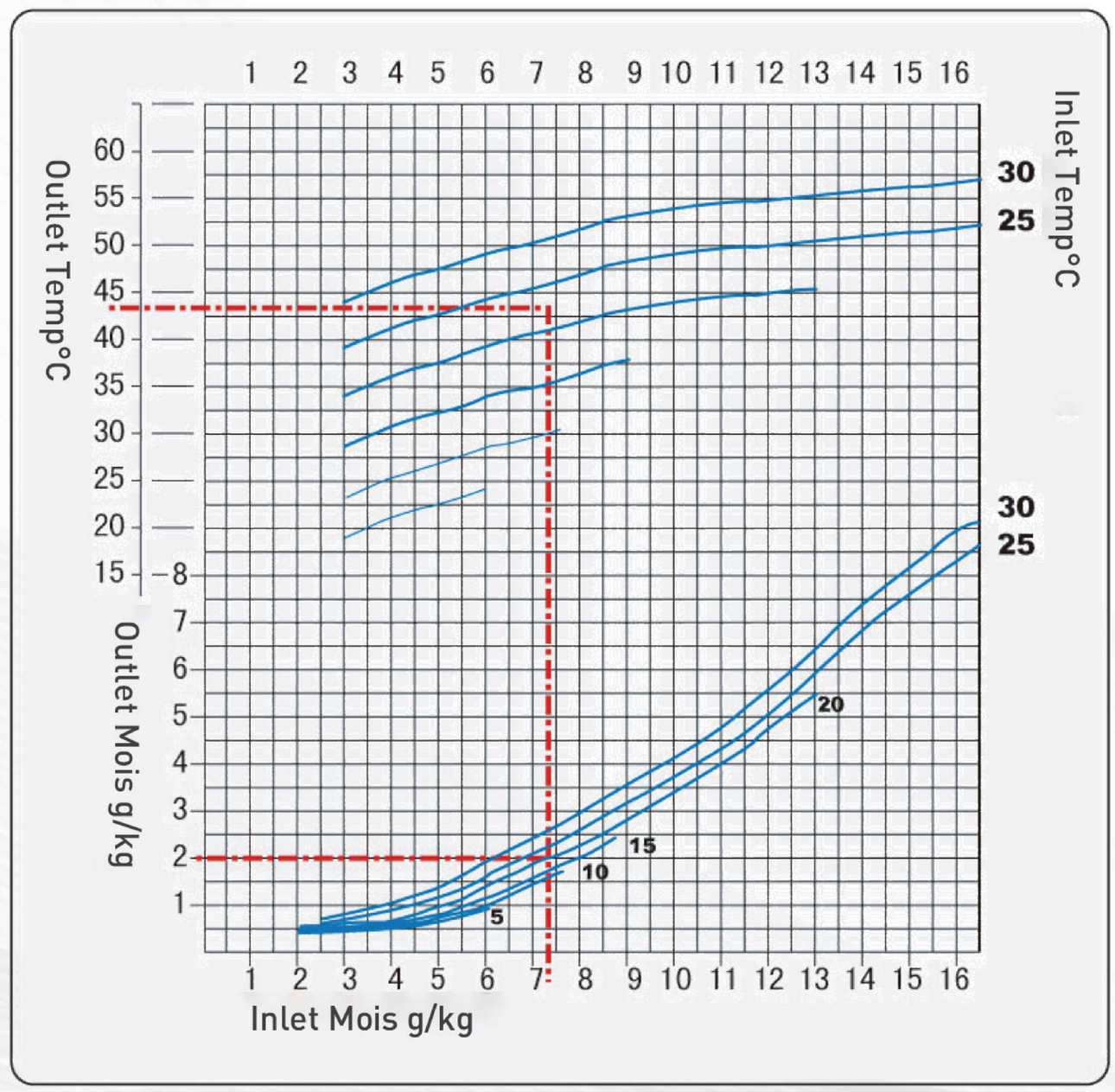
The filter design of the EU4 bag type ensures a large dust holding capacity, efficient dust filtration and good treatment of air quality. The standards adopted are EN1886, EN13053, EN779, etc.

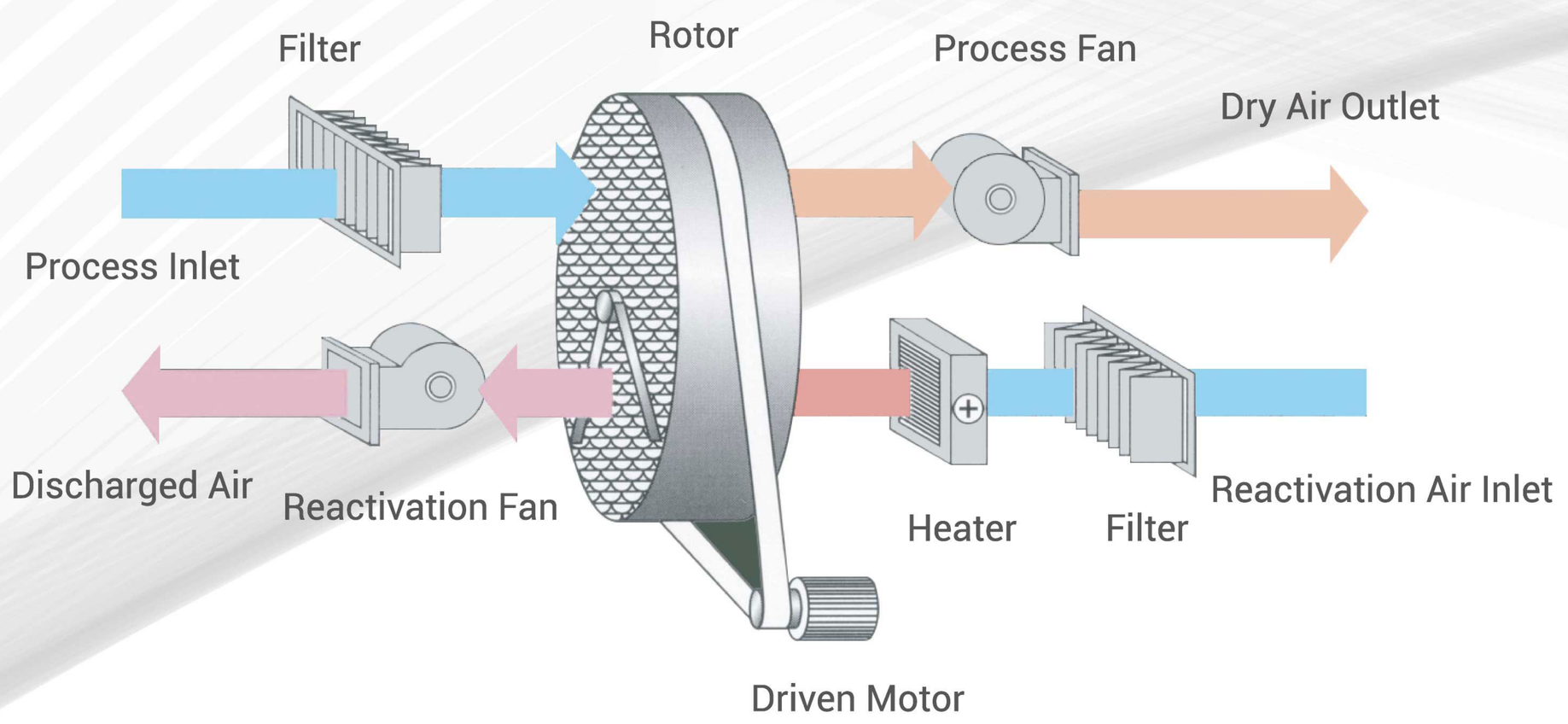
Advanced rotor dehumidification technology



DM1 model dehumidifier adopts European fifth generation titaniumized washable silica gel rotor, produced by Dryer's Swedish factory, which is able to achieve more than 82% gluing rate, extremely high dehumidification efficiency, long service life, suitable for all kinds of production processes and occasions that require high air quality, the design of professional structure and wind flow system can make the dehumidification utilization rate of the rotor reach more than 95%, greatly improve the operating efficiency, reduce the resistance of the equipment, save energy, and reduce the space of the equipment.

PERFORMANCE CURVE



Inlet condition: T=20℃ RH=50% AH=7.2g/kg
Outlet status: T=4220℃ RH=4% AH=2.0g/kg

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