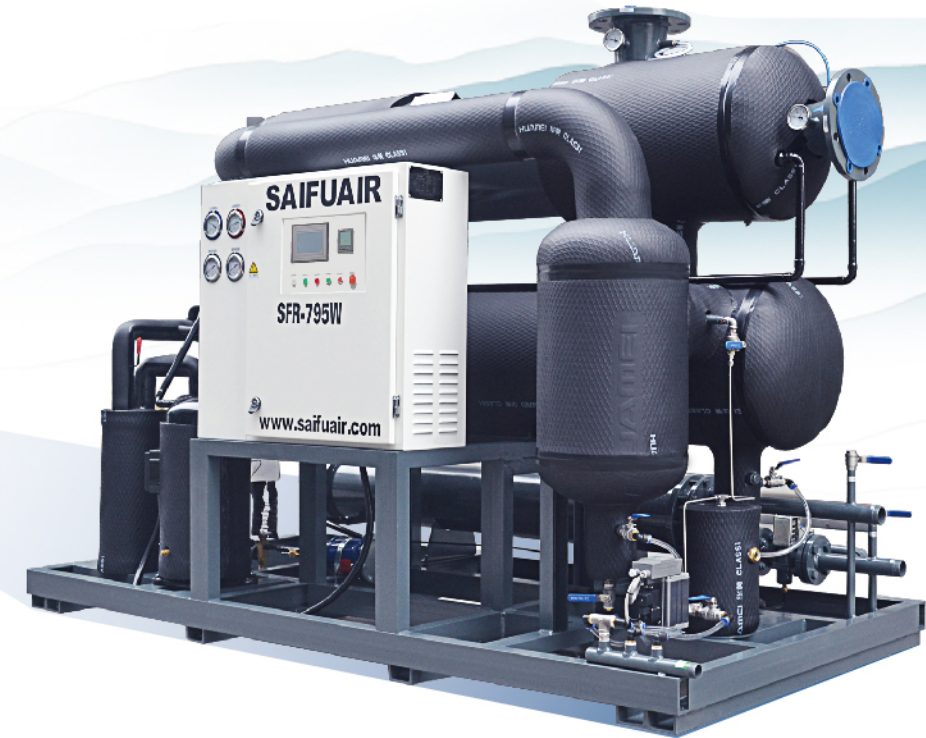


SAIFUAIR

Mutual trust and win win

Compressed
air purification expert



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FREEZE DRYER

Enterprise Honors



Company Profile

2000年	2000 Core team of the company was built.
2010年	2010 Suzhou SAIFUAIR Machine Co., Ltd. was established.
2011年	2011 Compression heat dryers were developed, manufactured, and put into use.
2012年	2012 Obtained production license of industrial products and passed the ISO9001 Qualification Management System certification.
2013年	2013 Blower heat regenerative adsorption dryers were developed, manufactured, and put into use.
2014年	2014 Explosion-proof dryers were developed, manufactured, and put into use.
2015年	2015 CO2 purification systems were developed, manufactured, and put into use. Won the title of High-Tech Enterprise, Science and Technology SMEs of Jiangsu Province, Jiangsu Province Science & Technology Enterprise. Suzhou SAIFUAIR Machine Engineering Technology Research Center was established.
2016年	2016 Obtained more than 40 utility model patents.
2017年	2017 Explosion-proof dryers for oil fields were developed successfully and put into use in Pertamina, the largest oil company in Indonesia.
2018年	2018 Energy-saving vacuum adsorption dryers were developed successfully and put into use.
2019年	2019 SAIFUAIR Gas Technology (Jiangsu) Co., Ltd. was established.
2020年	2020 Biogas dryers and tail gas dryers were developed successfully.

Suzhou SAIFUAIR Machine Co., Ltd. was formally founded on December 22, 2010. According to its strategic layout, SAIFUAIR Gas Technology (Jiangsu) Co., Ltd., functioned as a professional manufacturing base of compressed air purification equipment, was established in Yixing, Wuxi in 2019, with a registered capital of RMB 20 million and 103 employees, covering an area of 65 mu. SAIFUAIR is mainly engaged in the development, production, and marketing of compressed air purification equipment. Its series products include refrigeration dryers, heatless adsorption compressed air dryers, micro-heat adsorption dryers, combined compressed air dryers, compression heat regenerative adsorption dryers, heated blower purge desiccant air dryers, precision filters, precooling units, self-cleaning filters, and other core products. SAIFUAIR actively responds to national environmental policies, vigorously develops energy-saving products, and makes every effort to help customers save energy conservation and reduce consumption, finally realizing green development. Our products are widely used in various industries such as the electronics, chemical fiber, petroleum, chemical, paper, automotive, metallurgy, electric power, food, environmental protection, and pharmaceutical industry. SAIFUAIR has always taken scientific and technological innovation as the driving force of development and core competitiveness. Adhering to the principle of independent innovation, SAIFUAIR has obtained more than 50 utility model patents and the production license of industrial products and has passed the ISO9001 Qualification Management System certification. As a high-tech enterprise, SAIFUAIR has the best processing equipment and high-precision testing instruments. It has the strength and ability to provide customized full range compressed air purification units that have multiple functions and meet the requirements of various complex working conditions, such as air-cooled, water-cooled, normal temperature, high temperature, explosion-proof, high-pressure and special gas compressed air purification equipment. Our products are sold well at home and abroad and are well accepted and praised by our customers.



SFRseries refrigerated dryer



Introduction of the advantages of the machine

I. Appearance of the machine

The machine has an elegant appearance, sturdy and durable sheet metal, a reasonable shell design, easy disassembly, simple daily maintenance, and is convenient for repair and installation.

II. Freezing effect

The machine is equipped with a unique heat recovery device, and the heat exchanger has a large design capacity. Additionally, a uniquely designed gas-water separator is installed inside the machine, which has excellent water removal performance.

III. Attention to detail

Precise pressure gauge with copper tube surface coated with high temperature resistant anti-corrosion paint, and internal anti-corrosion treatment for the heat exchanger .

IV. Perfect control

Equipped with refrigerant high and low pressure protection, temperature control switch, thermal protection, under-reverse phase protection, fan motor 120°C protection.

V. Stable quality

The main components of the machine are made of famous brands in the industry, ensuring authenticity and stable quality.

Refrigerated dryer model description

SFR-110AG-S-P80

- 80 stands for: Working pressure of 80 bar
- Representative materials: Stainless Steel
- Product category: A is air-cooled room temperature, AG is air-cooled high temperature, Wis water-cooled room temperature, WG is water-cooled high temperature
- Machine Model: Selection processing capacity X10
- Machine type: R is cold dryer, A is suction dryer, C is combination machine
- Product Line: Saifuair SF Series Dryer

Dryer Selection Guide

Accurate selection of cold dryers

The refrigerated compressed air dryer is classified into two types: air-cooled and water-cooled, depending on the cooling method of the refrigeration system. It is also classified into standard series and high-temperature series according to the inlet temperature of the compressed air.

The selection of a refrigerated compressed air dryer requires determining the maximum volume flow of compressed air to be treated (m³/min, standard condition), the minimum inlet pressure MPa (g), the maximum inlet temperature (°C), nominal pressure dew point (°C), and the maximum ambient temperature (°C). Based on the above parameters, check the following table to get the selection coefficient, and calculate the actual nominal volumetric flow rate.

$$\text{Selection of treatment capacity (m}^3/\text{min)} = \frac{\text{Air compressor discharge volume(m}^3/\text{min)}}{\text{KA} \times \text{KB} \times \text{KC} \text{ or (KD)}}$$

Working pressure correction factor table (KA)

Working pressure(MPa)	0.5	0.6	0.7	0.8	0.9	1.0
Correction factor	0.85	0.9	1	1.03	1.05	1.1

Remark: If the working pressure is higher than 1.0MPa or lower than 0.5MPa, please contact us for further design.

Inlet temperature correction factor table(KB)

Correction factor(°C)	A	30	35	38	40	45
	AG	40	50	55	60	80
Correction factor		1.1	1	0.9	0.8	0.6

Remark: If the A cold dryer inlet temperature is higher than 45°C or lower than 30°C, please contact us for further design. If the AG cold dryer inlet temperature is higher than 80°C or lower than 40°C, please contact us for further design.

Ambient temperature correction factor table(KC)

Ambient temperature(°C)	A/AG	30	32	35	38	40	42
Correction factor		1.1	1	0.95	0.9	0.8	0.7

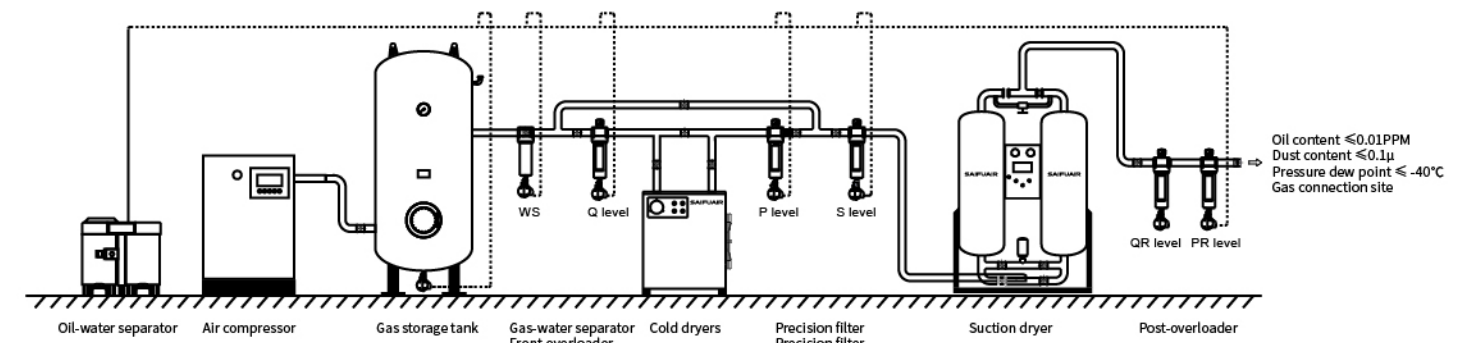
Remark: If the ambient temperature is higher than 42°C or lower than 30°C, please contact us for further design

Cooling water temperature correction factor table(KD)

Cooling water temperature(°C)	W/WG	25	30	32	35	40
Correction factor		1.1	1.05	1	0.85	0.7







Remark: If the cooling water temperature is higher than 40°C or lower than 25°C, please contact us for further design.

Dryer and surrounding purification equipment piping configuration diagram



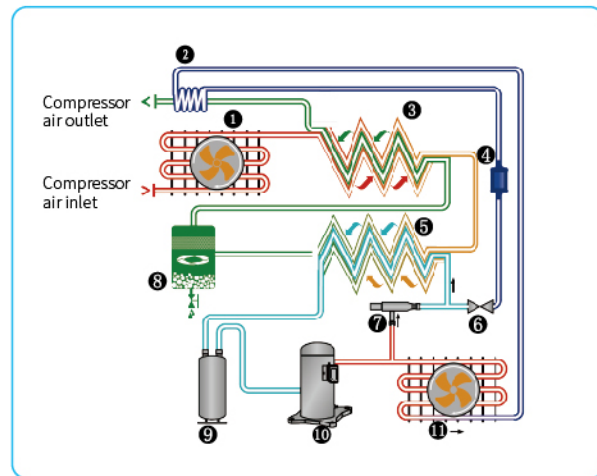
Air-cooled freeze dryer



-  Carefully designed heat exchangers, coolers, separators
-  Special design to increase cooling capacity utilization
-  The air outlet is equipped with heat recovery device, with good return temperature and no condensation.
-  Overcurrent, overload, refrigerant high/low voltage display/protection
-  The key components are all made of international famous brands, ensuring leading technology in the industry.
-  Specially equipped with a double automatic balancing control system to maintain the optimal pressure dew point at all times



Air treatment capacity: 0.8Nm³/min~415Nm³/min



▲The actual configuration is subject to the machine delivered from the factory

Standard configuration:

- ▲Under reverse phase protection
- ▲High and low voltage protection switch
- ▲Current overload protection
- ▲Hot gas bypass valve
- ▲Operation indicator
- ▲Start/Stop Switch

Optional configuration:

- ▲Dew point temperature display and signal transmission function
- ▲Remote control and dry contact can be reserved for interlock control function with air pressure system
- ▲Touch screen or LCD display combined with PLC programmable controller control, remote communication and signal transmission function
- ▲Inverter control

Special customization is available for:

- ▲High Temperature
- ▲High Voltage
- ▲Explosion-proof
- ▲A variety of environmentally friendly refrigerants
- ▲Various special gases

Air-cooled room temperature type refrigerated dryer technical parameters table (maximum inlet temperature ≤45°C)

Model	Treatment capacity Nm ³ /min	Power supply	Power consumptio kW	Refrigerant	Air inlet and outlet pipe diameter	Dimension mm			Weight kg
						Long	Wide	High	
SFR-038A	3.8	1φ/220V	0.8	R-22	G1 1/2"	1050	650	1100	130
SFR-058A	5.8	1φ/220V	1.0	R-22	G1 1/2"	1050	650	1100	135
SFR-071A	7.1	1φ/220V	1.3	R-22	G1 1/2"	1050	650	1100	140
SFR-086A	8.6	1φ/220V	1.5	R-22	G1 1/2"	1050	650	1100	150
SFR-110A	11	3φ/380V	2.3	R-22	DN50	1200	900	1290	290
SFR-130A	13	3φ/380V	2.5	R-22	DN50	1200	900	1290	300
SFR-175A	17.5	3φ/380V	3.3	R-22	DN80	1500	900	1290	370
SFR-210A	21	3φ/380V	3.6	R-22	DN80	1600	1000	1290	410
SFR-250A	25	3φ/380V	4.5	R-22	DN80	1600	1000	1290	430
SFR-304A	30.4	3φ/380V	5.2	R-22	DN100	1700	1050	1290	490
SFR-365A	36.5	3φ/380V	5.8	R-22	DN100	1700	1050	1290	510
SFR-450A	45	3φ/380V	8.0	R-22	DN125	2200	1300	1750	830
SFR-520A	52	3φ/380V	8.8	R-22	DN125	2200	1300	1750	850
SFR-605A	60.5	3φ/380V	9.3	R-22	DN125	2300	1300	1750	880
SFR-650A	65	3φ/380V	10.4	R-22	DN125	2300	1300	1750	900
SFR-713A	71.3	3φ/380V	11.3	R-22	DN150	2300	1400	1850	1050
SFR-795A	79.5	3φ/380V	11.8	R-22	DN150	2500	1400	1850	1130

- Standard air treatment conditions (air inlet pressure: 0.7MPa; air inlet temperature: 35°C (room temperature) / 50°C (high temperature); ambient temperature: 32°C; pressure dew point: 2-10 °C)。
- For air treatment with a volume greater than 79.5Nm³/min or special specifications, materials, temperature requirements, etc., please contact us for technical data.
- For volumes below 45Nm³/min, the unit is enclosed; for volumes of 45Nm³/min or more, the unit is open.
- This promotional material is not legally binding. The above product pictures and parameter table (models, specifications, colors) are for reference only, and subject to the technical agreement between the parties.

Air-cooled high-temperature type refrigerated dryer technical parameters table (maximum inlet temperature ≤ 80 °C)

Model	Treatment capacity Nm ³ /min	Power supply	Power consumptio kW	Refrigerant	Air inlet and outlet pipe diameter	Dimension mm			Weight kg
						Long	Wide	High	
SFR-014AG	1.4	1φ/220V	0.6	R-22	G1"	800	500	700	80
SFR-027AG	2.7	1φ/220V	0.7	R-22	G1"	800	500	700	100
SFR-038AG	3.8	1φ/220V	0.95	R-22	G1 1/2"	1050	650	1100	150
SFR-058AG	5.8	1φ/220V	1.1	R-22	G1 1/2"	1050	650	1100	155
SFR-071AG	7.1	1φ/220V	1.5	R-22	G1 1/2"	1050	650	1100	160
SFR-086AG	8.6	1φ/220V	1.7	R-22	G1 1/2"	1050	650	1100	170
SFR-110AG	11	3φ/380V	2.6	R-22	DN50	1200	900	1290	320
SFR-130AG	13	3φ/380V	2.8	R-22	DN50	1200	900	1290	330
SFR-175AG	17.5	3φ/380V	3.5	R-22	DN80	1500	900	1290	410
SFR-210AG	21	3φ/380V	4.1	R-22	DN80	1600	1000	1290	460
SFR-250AG	25	3φ/380V	5.0	R-22	DN80	1600	1000	1290	480
SFR-304AG	30.4	3φ/380V	5.7	R-22	DN100	1700	1050	1290	550
SFR-365AG	36.5	3φ/380V	6.3	R-22	DN100	1700	1050	1290	570
SFR-450AG	45	3φ/380V	8.8	R-22	DN125	2200	1300	1750	930
SFR-520AG	52	3φ/380V	9.5	R-22	DN125	2200	1300	1750	950
SFR-605AG	60.5	3φ/380V	10.1	R-22	DN125	2300	1300	1770	980
SFR-650AG	65	3φ/380V	11.1	R-22	DN125	2300	1300	1770	1000
SFR-713AG	71.3	3φ/380V	12.5	R-22	DN150	2300	1400	1910	1200
SFR-795AG	79.5	3φ/380V	13.1	R-22	DN150	2500	1400	1910	1280

- Standard air treatment conditions (air inlet pressure: 0.7MPa; air inlet temperature: 35°C (room temperature) / 50°C (high temperature); ambient temperature: 32°C; pressure dew point: 2-10 °C)。
- For air treatment with a volume greater than 79.5Nm³/min or special specifications, materials, temperature requirements, etc., please contact us for technical data.
- For volumes below 45Nm³/min, the unit is enclosed; for volumes of 45Nm³/min or more, the unit is open.
- This promotional material is not legally binding. The above product pictures and parameter table (models, specifications, colors) are for reference only, and subject to the technical agreement between the parties.

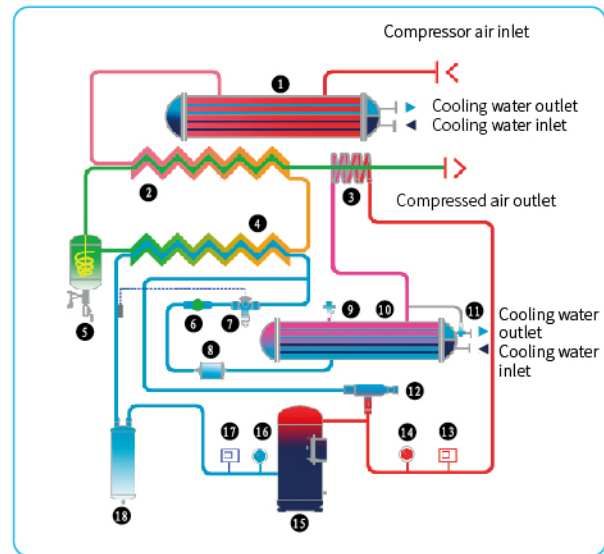
Water-cooled freeze dryer



- Carefully designed heat exchangers, coolers, separators
- Special design to increase cooling capacity utilization
- The air outlet is equipped with heat recovery device, with good return temperature and no condensation.
- Overcurrent, overload, refrigerant high/low voltage display/protection
- The key components are all made of international famous brands, ensuring leading technology in the industry.
- Specially equipped with a double automatic balancing control system to maintain the optimal pressure dew point at all times



Air treatment capacity: 3.8Nm³/min~900Nm³/min



- ① Water-cooled pre-cooler (For WG only)
- ② Heat exchanger
- ③ Heat recovery device
- ④ Evaporizer
- ⑤ Cyclone separator
- ⑥ Windows
- ⑦ Thermal expansion valve
- ⑧ Drying filter
- ⑨ Refrigerant safety relief valve
- ⑩ Water-cooled condenser
- ⑪ Water flow control valve
- ⑫ hot gas bypass valve
- ⑬ High voltage protection switch
- ⑭ Refrigerant high pressure meter
- ⑮ refrigeration compressor
- ⑯ Refrigerant Low Pressure Meter
- ⑰ Low voltage protection switch
- ⑱ Reservoir

▲The actual configuration is subject to the machine delivered from the factory

Standard configuration:

- ▲Under reverse phase protection
- ▲High and low voltage protection switch
- ▲Current overload protection
- ▲Hot gas bypass valve
- ▲Operation indicator
- ▲Start/Stop Switch

Standard configuration:

- ▲Dew point temperature display and signal transmission function
- ▲Remote control and dry contact can be reserved for interlocking control function with air pressure system
- ▲Touch screen or LCD display combined with PLC programmable controller control, remote communication and signal transmission function
- ▲Inverter control

Special customization is available for:

- ▲High Temperature
- ▲High Voltage
- ▲Explosion-proof
- ▲A variety of environmentally friendly refrigerants
- ▲Various special gases

Water-cooled room temperature type refrigerated dryer technical parameters table (maximum inlet temperature ≤ 45°C)

Model	Treatment capacity Nm ³ /min	Power supply	Power consumption kW	Refrigerant	Air Inlet and outlet pipe diameter	Condenser inlet and outlet pipe diameter	Cooling water volume m ³ /hr	Dimension mm			Weight kg
								Long	Wide	High	
SFR-110W	11	3φ/380V	2.0	R-22	DN50	G3/4"	1.5	1200	900	1290	290
SFR-130W	13	3φ/380V	2.2	R-22	DN50	G3/4"	1.8	1200	900	1290	300
SFR-175W	17.5	3φ/380V	2.8	R-22	DN80	G3/4"	2.5	1500	900	1290	390
SFR-210W	21	3φ/380V	3.1	R-22	DN80	G1"	3.0	1600	1000	1290	430
SFR-250W	25	3φ/380V	4.0	R-22	DN80	G1"	3.5	1600	1000	1290	450
SFR-304W	30.4	3φ/380V	4.7	R-22	DN100	G1"	4.5	1700	1050	1290	520
SFR-365W	36.5	3φ/380V	5.3	R-22	DN100	G1"	5.0	1700	1050	1290	540
SFR-450W	45	3φ/380V	6.8	R-22	DN125	G1 1/2"	6.5	2200	1200	1750	830
SFR-520W	52	3φ/380V	7.5	R-22	DN125	G1 1/2"	7.0	2200	1200	1750	850
SFR-605W	60.5	3φ/380V	8.1	R-22	DN125	G1 1/2"	8.5	2300	1200	1750	880
SFR-650W	65	3φ/380V	9.1	R-22	DN125	G1 1/2"	9.0	2300	1200	1750	900
SFR-713W	71.3	3φ/380V	9.6	R-22	DN150	G1 1/2"	10.0	2300	1250	1850	1050
SFR-795W	79.5	3φ/380V	10.1	R-22	DN150	G1 1/2"	11.0	2500	1250	1850	1150
SFR-950W	95	3φ/380V	12.4	R-22	DN150	G1 1/2"	13.0	2500	1250	1850	1200
SFR-1100W	110	3φ/380V	13.5	R-22	DN200	DN50	15.0	2600	1400	1980	1350
SFR-1300W	130	3φ/380V	16.4	R-22	DN200	DN50	18.0	2600	1400	1980	1400
SFR-1430W	143	3φ/380V	18.5	R-22	DN200	DN65	20.0	2800	1400	1980	1500
SFR-1710W	171	3φ/380V	24.8	R-22	DN200	DN65	24.0	2800	1400	1980	1600
SFR-2100W	210	3φ/380V	32.8	R-22	DN250	DN65	29.0	3200	1600	2380	2600
SFR-2650W	265	3φ/380V	36.8	R-22	DN250	DN65	36.0	3500	1700	2500	2800
SFR-2950W	295	3φ/380V	41.5	R-22	DN300	DN80	40.0	3700	1700	2500	2950
SFR-3450W	345	3φ/380V	45.6	R-22	DN300	DN80	45.0	4000	1900	2680	3400
SFR-4150W	415	3φ/380V	51.3	R-22	DN400	DN100	55.0	4000	2000	2750	3800

Note:

- Dryer use conditions (air inlet pressure: 0.7 MPa; air inlet temperature: 35°C; cooling water pressure: 0.2-0.6MPa; Cooling water temperature: 2-32°C; pressure dew point: 2 - 10 °C).
- For air treatment with a large volume or special specifications, material and pressure dew point requirements, please contact our technical center for technical information.
- For volumes below 45Nm³/min, the unit is enclosed; for volumes of 45Nm³/min or more, the unit is open.
- This promotional material is not legally binding. The above product pictures and parameter table (models, specifications, colors) are for reference only, and subject to the technical agreement between the parties.

Water-cooled high temperature type refrigerated dryer technical parameters table (maximum inlet temperature ≤ 80 °C)

Model	Treatment capacity Nm ³ /min	Power supply	Power consumption kW	Refrigerant	Air Inlet and outlet pipe diameter	Condenser Inlet and outlet pipe diameter	Cooler Inlet and outlet pipe diameter	Cooling water volume m ³ /hr	Dimension mm			Weight kg
									Long	Wide	High	
SFR-110WG	11	3φ/380V	2.0	R-22	DN50	G3/4"	G1"	3.0	1200	900	1290	350
SFR-130WG	13	3φ/380V	2.2	R-22	DN50	G3/4"	G1"	3.6	1200	900	1290	360
SFR-175WG	17.5	3φ/380V	2.8	R-22	DN80	G3/4"	G1"	5.0	1500	900	1290	470
SFR-210WG	21	3φ/380V	3.1	R-22	DN80	G1"	G1"	6.0	1600	1000	1290	520
SFR-250WG	25	3φ/380V	4.0	R-22	DN80	G1"	G1"	7.0	1600	1000	1290	540
SFR-304WG	30.4	3φ/380V	4.7	R-22	DN100	G1"	G1 1/2"	9.0	1700	1050	1290	620
SFR-365WG	36.5	3φ/380V	5.3	R-22	DN100	G1"	G1 1/2"	10.0	1700	1050	1290	640
SFR-450WG	45	3φ/380V	6.8	R-22	DN125	G1 1/2"	G1 1/2"	13.0	2200	1200	1750	950
SFR-520WG	52	3φ/380V	7.5	R-22	DN125	G1 1/2"	G1 1/2"	14.0	2200	1200	1750	970
SFR-605WG	60.5	3φ/380V	8.1	R-22	DN125	G1 1/2"	G2"	17.0	2300	1300	1770	1080
SFR-650WG	65	3φ/380V	9.1	R-22	DN125	G1 1/2"	G2"	18.0	2300	1300	1770	1100
SFR-713WG	71.3	3φ/380V	9.6	R-22	DN150	G1 1/2"	G2"	20.0	2300	1350	1910	1260
SFR-795WG	79.5	3φ/380V	10.1	R-22	DN150	G1 1/2"	G2"	22.0	2500	1350	1910	1380
SFR-950WG	95	3φ/380V	12.4	R-22	DN150	G1 1/2"	G2"	26.0	2500	1350	1910	1430
SFR-1100WG	110	3φ/380V	13.5	R-22	DN200	DN50	G2 1/2"	30.0	2600	1600	2080	1650
SFR-1300WG	130	3φ/380V	16.4	R-22	DN200	DN50	G2 1/2"	36.0	2600	1600	2080	1700
SFR-1430WG	143	3φ/380V	18.5	R-22	DN200	DN65	G2 1/2"	40.0	2800	1600	2080	1800
SFR-1710WG	171	3φ/380V	24.8	R-22	DN200	DN65	G2 1/2"	48.0	2800	1600	2080	1900

Note:

- Dryer use conditions (air inlet pressure: 0.7 MPa; air inlet temperature: 50°C; cooling water pressure: 0.2-0.6MPa; Cooling water temperature: 2-32°C; pressure dew point: 2 - 10 °C).
- For air treatment with a large volume or special specifications, material and pressure dew point requirements, please contact our technical center for technical information.
- For volumes below 45Nm³/min, the unit is enclosed; for volumes of 45Nm³/min or more, the unit is open.
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Description of characteristics

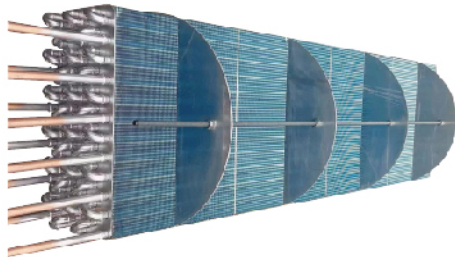
Key components & parts

Key components and parts produced by international renowned brands are used to ensure stable operation of dryers.



Special heat exchanger

Internally, thickened copper tubes are used for high heat exchange efficiency, long service life, and low susceptibility to damage. The heat exchanger assembly is designed through professional computer simulation and testing to achieve optimal heat exchange efficiency while ensuring the lowest differential pressure.



Energy efficient evaporator

The shell is specially treated with anti-corrosion coating for better corrosion resistance. The use of clean water aluminum foil and aluminum fins facilitates the sinking of condensation water and ensures smooth drainage. The special baffle design reduces resistance and minimizes pressure drop. Machines with a volume of 45 cubic meters or more come with detachable flanges.



Heat recovery unit

A secondary condenser is added to the air outlet to cool the high temperature refrigerant using the compressed air outlet cooling source, which increases the heat dissipation effect of the refrigeration system and reduces the load on the refrigeration compressor. It also raises the compressed air outlet temperature to prevent pipe condensation.



High efficiency heat sink

1. The heat dissipation area is enlarged, and the heat dissipation effect is sufficient.
2. The design adopts a cleanable aluminum foil and aluminum fin structure with a long service life.
3. The heat dissipation fan is designed to prevent heat reflux, and the external fan is easy to maintain.
4. A professionally customized external rotor motor is used, with imported bearings and coil protection.

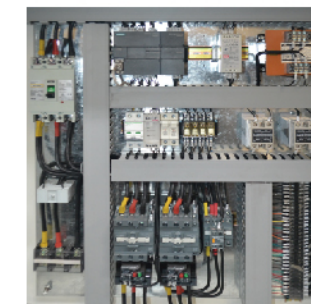
Description of characteristics

Key components & parts



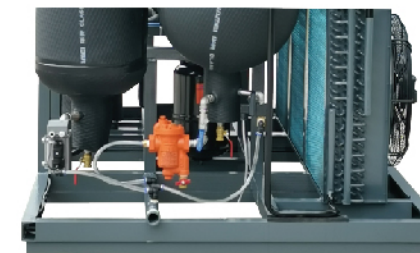
Sophisticated control system

The large machine uses a touch screen combined with a programmable logic controller (PLC) for remote monitoring. The compressor can be intelligently monitored and regulated, resulting in stable operation, high efficiency, energy savings, and easy operation. The electronic display shows the voltage and current readings clearly and prominently. The stainless steel oil-filled gauge avoids vibration errors caused by long-distance transportation and high-pressure refrigeration systems. The gauges are color-coded for easy daily inspection. Stainless steel oil-filled meters avoid vibration errors caused by long-distance transportation and refrigerant high-pressure systems; meters are distinguished by different colors to facilitate daily inspections.



Safe and reliable protection device

The electrical components are all made of well-known brands at home and abroad, and come standard with overload electric stage and under-phase protection as standard. The refrigeration system is equipped with high and low pressure protection to ensure the safe operation of the machine; the water-cooled model adopts SAGINOMIYA water flow control valve, and the condenser of the air-cooled model is equipped with antifreeze switch and temperature control switch, which can effectively prevent evaporator icing.



Complete drainage system

Equipped with multiple automatic and manual drain valves, it can drain and drain the air in time and effectively to ensure the dew point temperature of the air outlet.



Water cooler, condenser

Designed with large margins, with enhanced anti-corrosion treatment on internal details, ensuring the equipment is durable. Adopt SAGINOMIYA water flow regulating valve to automatically adjust the cooling water volume according to the high pressure of refrigerant.

Precision filters



- Inlet air temperature $\leq 80^{\circ}\text{C}$ (C level 35°C)
- Initial pressure drop $\leq 0.01\text{MPa}$
- Moisture load: Q-5000ppm P-2000ppm S-100ppm
- Maximum working pressure: 0.98 MPa
- Air treatment capacity: 0.4Nm³/min ~ 900Nm³/min

Principle diagram

Optional configuration:

- ▲ All stainless steel
- ▲ Float type drain valve or electronic drain valve
- ▲ Differential pressure gauge

Special customization is available for:

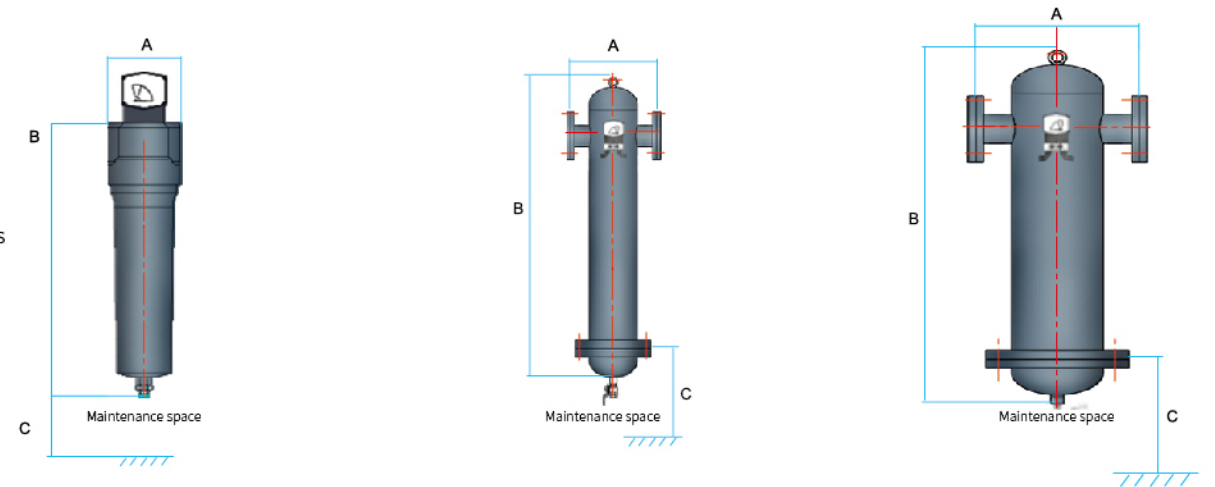
- ▲ High temperature
- ▲ High Voltage
- ▲ Large treatment capacity
- ▲ Non-compressed air
- ▲ Degerm filter
- ▲ Stand
- ▲ Top open type



Precision filter technical parameters table

	Level	WS level	Q level	P level	S level	C level	QR level	PR level	SR level
Filtration accuracy	Oil content	-----	$\leq 3\text{PPM}$ $\leq 5\text{Mg/m}^3$	$\leq 1\text{PPM}$ $\leq 1\text{Mg/m}^3$	$\leq 0.01\text{PPM}$ $\leq 0.01\text{Mg/m}^3$	$\leq 0.003\text{PPM}$ $\leq 0.003\text{Mg/m}^3$	-----	-----	-----
	Foreign particle	$\leq 10\text{Micron}$	$\leq 3\text{Micron}$	$\leq 1\text{Micron}$	$\leq 0.01\text{Micron}$	-----	$\leq 3\text{Micron}$	$\leq 1\text{Micron}$	$\leq 0.01\text{Micron}$
Differential pressure	Initial	0.001M	0.004MPa	0.007MPa	0.01MPa	0.007MPa	0.004MPa	0.007MPa	0.01MPa
	In Use	-----	0.007MPa	0.014MPa	0.03MPa	-----	0.007MPa	0.014MPa	0.03MPa
	Must be replaced	-----	0.04MPa	0.04MPa	0.04MPa	1000h (25°C)	0.04MPa	0.04MPa	0.04MPa
Material		Hydrophobic filter paper	Multi-layer glass fiber cartridge	Multi-layer glass fiber cartridge	Multi-layer glass fiber cartridge	Activated carbon cartridge	Multi-layer glass fiber cartridge	Multi-layer glass fiber cartridge	Multi-layer glass fiber cartridge
Maximum operating temperature		80°C	80°C	80°C	80°C	80°C	80°C	80°C	80°C
Function		Gas-water separator	Oil and dust coarse filtration	Oil, impurity fine filtration	Oil, impurity fine filtration	Activated carbon cartridge	Suction dryer post-dust filter	Suction dryer post-dust filter	Suction dryer post-precision filter

Specific specifications are shown below



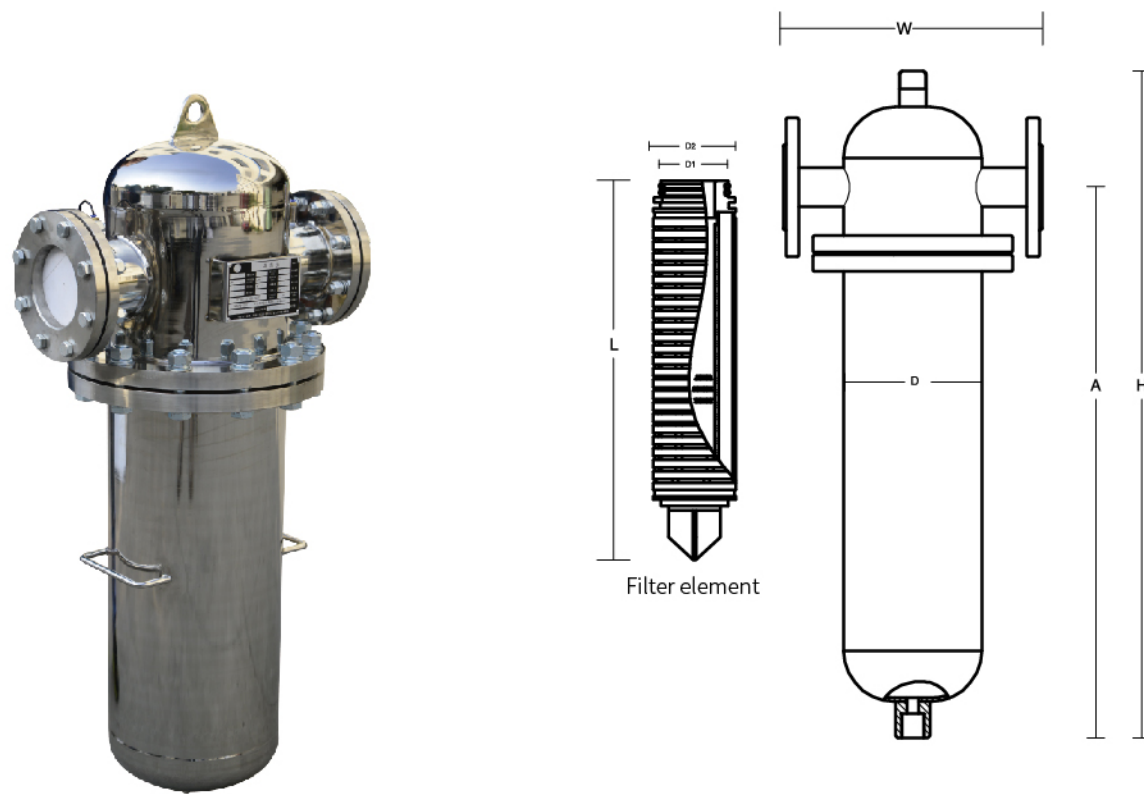
Precision filter specification table (maximum inlet temperature $\leq 80^{\circ}\text{C}$)

Model	Air treatment capacity Nm ³ /min	Air inlet and outlet pipe diameter	Dimension mm			Weight kg
			A	B	C	
SFF-028	2.8	1"	117	294	300	3
SFF-060	6.0	1-1/2"	134	428	400	4.5
SFF-090	9.0	2"	160	555	500	6.5
SFF-150	15.0	2-1/2"	205	620	500	12.5
SFF-250	25.0	3"	205	810	750	15
SFF-300	30.0	DN100	310	1330	1000	55
SFF-370	37.0	DN100	420	1220	850	75
SFF-450	45.0	DN125	475	1220	770	100
SFF-600	60.0	DN125	565	1220	770	120
SFF-750	75.0	DN150	600	1310	770	180
SFF-900	90.0	DN150	600	1380	770	190
SFF-1200	120	DN200	660	1400	770	210
SFF-1500	150	DN200	700	1450	770	220
SFF-1800	180	DN200	700	1500	890	230
SFF-2100	210	DN250	860	1550	770	310
SFF-2550	255	DN250	860	1610	770	330
SFF-3000	300	DN300	905	1850	770	440

Note:

1. C level filter air inlet temperature $\leq 35^{\circ}\text{C}$; filtration precision: refer to filtration accuracy table (air inlet pressure: 0.7MPa; Air inlet temp: 50°C).
2. For air treatment with a large volume or special specifications and material requirements, please contact our technical center for technical information.
3. This promotional material is not legally binding. The above product pictures and parameter table (models, specifications, colors) are for reference only, and subject to the technical agreement between the parties.

Sterilization filter



Sterilization filter cartridge parameter table

Specification	Interface form	D1	D2	L	Filter material	Skeleton material	O-ring material
5"	226	Φ56	Φ69	200	PTFE	PP	Silicone
10"	226	Φ56	Φ69	320	PTFE	PP	Silicone
20"	226	Φ56	Φ69	560	PTFE	PP	Silicone

Sterilization filter parameter table

Model	Air treatment capacity Nm ³ /min	Air inlet and outlet pipe diameter	A	H	D	W	Quantity × Length	Housing Material
SFF-028SL	2.8	G11/2"	340	440	Φ114	214	1 × 5"	304
SFF-060SL	6.0	G11/2"	440	540	Φ114	214	1 × 10"	304
SFF-120SL	12	G21/2"	710	806	Φ114	214	1 × 20"	304
SFF-180SL	18	DN65	-----	780	Φ184	344	3 × 10"	304
SFF-370SL	37	DN80	-----	1050	Φ184	344	3 × 20"	304
SFF-600SL	60	DN125	-----	1170	Φ234	414	5 × 20"	304
SFF-900SL	90	DN150	-----	1260	Φ274	454	7 × 20"	304

Note:

- The filtration accuracy is typically 0.22μm, but can be customized to 0.01μm upon request. Air inlet pressure 0.8MPa; air inlet temperature 5-80°C; steam sterilization temperature 121°C for half an hour.
- For air treatment with a large volume or special specifications and material requirements, please ask our technical center for technical information.
- This promotional material is not legally binding. The above product pictures and parameter table (models, specifications, colors) are for reference only, and subject to the technical agreement between the parties.

Air pre-cooling units



- Air inlet temperature ≤ 45°C
- Air outlet temperature 5~8°C
- Cooling water inlet pressure 0.2-0.6MPa
- Cooling water inlet temperature ≤ 32°C
- Work stress: 1.0 MPa



The key components are all made of international famous brands, ensuring stable operation of the equipment.



Technical parameters of air pre-cooling unit

Model	Treatment capacity Nm ³ /min	Power supply	Power consumption kW	Refrigerant	Air Inlet and outlet pipe diameter	Condenser inlet and outlet pipe diameter	Cooling water volume m ³ /hr	Dimension mm			Weight kg
								Long	Wide	High	
SFR-110WF	11	3φ/380V	2.0	R-22	DN50	G3/4"	1.5	1200	900	1290	290
SFR-130WF	13	3φ/380V	2.2	R-22	DN50	G3/4"	1.8	1200	900	1290	300
SFR-175WF	17.5	3φ/380V	2.8	R-22	DN80	G3/4"	2.5	1500	900	1290	390
SFR-210WF	21	3φ/380V	3.1	R-22	DN80	G1"	3.0	1600	1000	1290	430
SFR-250WF	25	3φ/380V	4.0	R-22	DN80	G1"	3.5	1600	1000	1290	450
SFR-304WF	30.4	3φ/380V	4.7	R-22	DN100	G1"	4.5	1700	1050	1290	520
SFR-365WF	36.5	3φ/380V	5.3	R-22	DN100	G1"	5.0	1700	1050	1290	540
SFR-450WF	45	3φ/380V	6.8	R-22	DN125	G1 1/2"	6.5	2200	1200	1750	830
SFR-520WF	52	3φ/380V	7.5	R-22	DN125	G1 1/2"	7.0	2200	1200	1750	850
SFR-605WF	60.5	3φ/380V	8.1	R-22	DN125	G1 1/2"	8.5	2300	1200	1750	880
SFR-650WF	65	3φ/380V	9.1	R-22	DN125	G1 1/2"	9.0	2300	1200	1750	900
SFR-713WF	71.3	3φ/380V	9.6	R-22	DN150	G1 1/2"	10.0	2300	1250	1850	1050
SFR-795WF	79.5	3φ/380V	10.1	R-22	DN150	G1 1/2"	11.0	2500	1250	1850	1150
SFR-950WF	95	3φ/380V	12.4	R-22	DN150	G1 1/2"	13.0	2500	1250	1850	1200
SFR-1100WF	110	3φ/380V	13.5	R-22	DN200	DN50	15.0	2600	1400	1980	1350
SFR-1300WF	130	3φ/380V	16.4	R-22	DN200	DN50	18.0	2600	1400	1980	1400
SFR-1430WF	143	3φ/380V	18.5	R-22	DN200	DN65	20.0	2800	1400	1980	1500
SFR-1710WF	171	3φ/380V	24.8	R-22	DN200	DN65	24.0	2800	1400	1980	1600
SFR-2100WF	210	3φ/380V	32.8	R-22	DN250	DN65	29.0	3200	1600	2380	2600
SFR-2650WF	265	3φ/380V	36.8	R-22	DN250	DN65	36.0	3500	1700	2500	2800
SFR-2950WF	295	3φ/380V	41.5	R-22	DN300	DN80	40.0	3700	1700	2500	2950
SFR-3450WF	345	3φ/380V	45.6	R-22	DN300	DN80	45.0	4000	1900	2680	3400
SFR-4150WF	415	3φ/380V	51.3	R-22	DN400	DN100	55.0	4000	2000	2750	3800

Note:

- Dryer use conditions (air inlet pressure: 0.7 MPa; air inlet temperature: 35°C; cooling water pressure: 0.2-0.6MPa; Cooling water temperature: 2-32°C; outlet temperature: 15 °C).
- For other air inlet and outlet conditions, larger air treatment capacity or special specifications, materials and pressure dew point requirements, please contact our technical center for technical information.
- This promotional material is not legally binding. The above product pictures and parameter table (models, specifications, colors) are for reference only, and subject to the technical agreement between the parties.

A partial performance display of our cold dryer



Private large-scale petrochemical enterprise



Listed paper-making enterprise

A partial performance display of our cold dryer



Listed Rubber Company



Listed chemical fiber company



Top biological vaccine enterprise



Listed wheel hub enterprise



Listed food manufacturer



Listed and well-known pharmaceutical company



Famous photoelectric enterprise



Famous shipbuilding enterprise

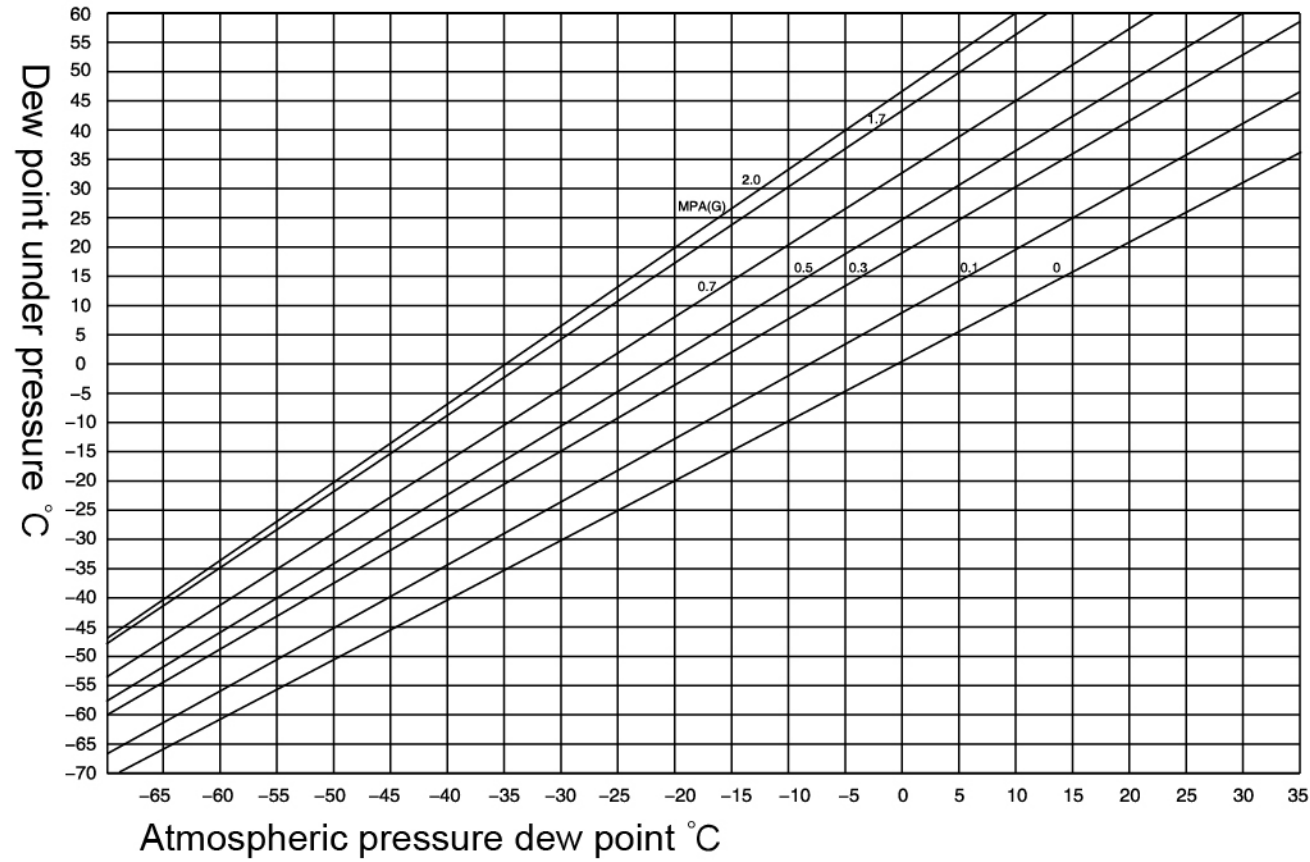


Famous large-scale textile enterprise



Famous large-scale new material enterprise

Pressure dew point and atmospheric pressure dew point conversion chart



Some business partners



Atmospheric dew point - moisture content relationship table

Dew point °C	Moisture content g/m³	Dew point °C	Moisture content g/m³	Dew point °C	Moisture content g/m³	Dew point °C	Moisture content g/m³	Dew point °C	Moisture content g/m³
64	153.8	39	48.7	14	12.1	-11	2.19	-36	0.260
63	147.3	38	46.3	13	11.4	-12	2.03	-37	0.236
62	141.2	37	44.0	12	10.7	-13	1.88	-38	0.214
61	135.3	36	41.8	11	10.0	-14	1.74	-39	0.194
60	130.3	35	39.6	10	9.3	-15	1.61	-40	0.176
59	124.7	34	37.6	9	8.8	-16	1.48	-41	0.159
58	119.4	33	35.7	8	8.3	-17	1.37	-42	0.144
57	114.2	32	33.8	7	7.8	-18	1.26	-43	0.130
56	109.2	31	32.1	6	7.3	-19	1.17	-44	0.117
55	104.4	30	30.4	5	6.8	-20	1.07	-45	0.106
54	99.8	29	28.8	4	6.4	-21	0.99	-46	0.095
53	95.4	28	27.2	3	5.9	-22	0.91	-47	0.085
52	91.1	27	25.8	2	5.6	-23	0.84	-48	0.077
51	87.0	26	24.4	1	5.2	-24	0.77	-49	0.069
50	83.1	25	23.1	0	4.8	-25	0.70	-50	0.062
49	79.3	24	21.8	-1	4.5	-26	0.65	-51.1	0.054
48	75.6	23	20.6	-2	4.2	-27	0.59	-53.9	0.040
47	72.3	22	19.4	-3	3.9	-28	0.54	-56.7	0.029
46	68.7	21	18.3	-4	3.7	-29	0.50	-59.4	0.021
45	65.5	20	17.3	-5	3.4	-30	0.45	-62.2	0.014
44	64.1	19	16.3	-6	3.2	-31	0.41	-65.0	0.011
43	59.4	18	15.4	-7	2.9	-32	0.38	-67.8	0.008
42	56.6	17	14.5	-8	2.7	-33	0.34	-70.6	0.005
41	53.8	16	13.6	-9	2.5	-34	0.31	-73.3	0.003
40	51.2	15	12.8	-10	2.4	-35	0.29		