EPSEA

SUPER GREAT FACTORY | AIR DRYER, N_2 & O_2, SPARE PARTS

MODULAR
DESICCANT AIR DRYER

EPSEA

SUPER GREAT FACTORY | AIR DRYER, N_2 & O_2, SPARE PARTS

EPSEA integrate manufacture, sales, R&D and service together, covering **air dryer, nitrogen and oxygen generator, pressure vessel, filter, separator** and so on, we are applicable to any industry that needs safe and reliable compressed air.

2,000+ m^2

R&D Lab

80,000+ m^2

Full-chain Specialized Manufacture Center

800+

Worldwide Employees & Worldwide Factory Warehouse & Service Center

● Factory I

● Factory II

www.epsea.com

Factory : FUJIAN EPSEA INDUSTRIAL CO., LTD.

Headquarters : GUANGDONG EPSEA INDUSTRIAL CO., LTD.

EPSEAGROUP

HIGH-PERFORMANCE HIGH-QUALITY
MORE ENVIRONMENTALLY WORRY-FREE

High-performance Compressed Air Purification Equipment

The modern industrial for the requirements of compressed air an be divide into the following 4 aspects: pressure, air flow, dry degree(the dew point temperature after moisture content) and cleanliness(including: solid, oil mist, microbial and harmful gas etc).The pressure and air flow factors are related to the correct selection of compressed air and energy loss; the requirements of dry degree means removing the moisture in the compressed air through the compressed air dryer to achieve dry; the requirement of cleanliness mean using filters or degreasing purifier to remove the pollutant in the compressed air with oil, solid impurity, microbe etc.

By optimizing the design, EPSEA selects high-quality product components, each component can be traces to source, a completely quality management system, each process can be accountable. Strict quality control to ensure that every "You Qiao" product can be operated stably and at high speed.

Epsea's near-rigid quality control ensures the stability and reliability of each product; EPSEA has made energy saving and emission reduction, which has created the low-pressure drop, low gas consumption and energy-saving module adsorption dryer.

High-quality Compressed Air Production Guarantee

Compressed air is a kind of important power that widely used in industrial field. It comes from atmosphere which contains a large amount of dust, moisture, impurities etc. Without purified compressed air will be serious wear the pneumatic equipment, causes the blockage and corrosion for the valve and pipeline, the damage of production equipment , the products scrap, affect the normal production. Therefore, purify the compressed air is necessary.

“EPSEA” has many years professional experience. We are not only focused on the R&D and manufacture in compressed air purification industry, but also provide more economical and efficient compressed air purification solution for all users, through our understanding and summary to manufacturing.

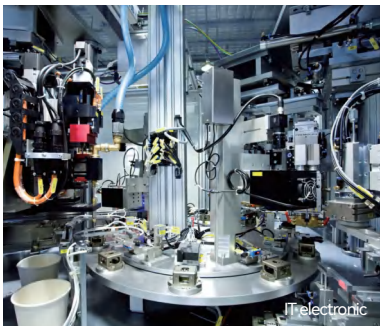
Green environmentally compressed air purification expert

Nowadays, global climate is faced with increasingly serious problems. With the environment growing worsening, EPSEA holds on low-carbon development and focuses on providing environmental-friendly and energy saving products. With practices of offering freezing dryer with environmental fluorine, modular adsorption dryer of low gas consumption as well as no consumption regenerative adsorption dryer. EPSEA is genuinely putting energy saving and environmental protection into practice, making its own contribution to environmental protecting cause.

Excellect Solution

When you choose the compressed air equipment, you should consider the air quality, investment cost and after service etc, that is the basis of your working free of disturbance. EPSEA company with complete product series and excellent after service is the best partner which help you to make the right choice, and assure you to get the optimal solution.

The modern production processes for the compressed air quality requirements is higher and higher, many industries have stringent requirements for the cleanliness of compressed air, to ensure the stable production and superior products quality, to ensure the stable production and superior products quality. Only adsorption dryer (after equipped with corresponding filtration separation system) can provide the compressed air with completely clean and dry.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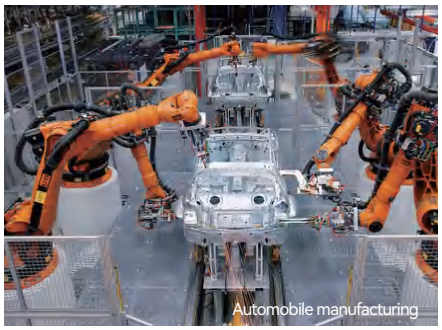
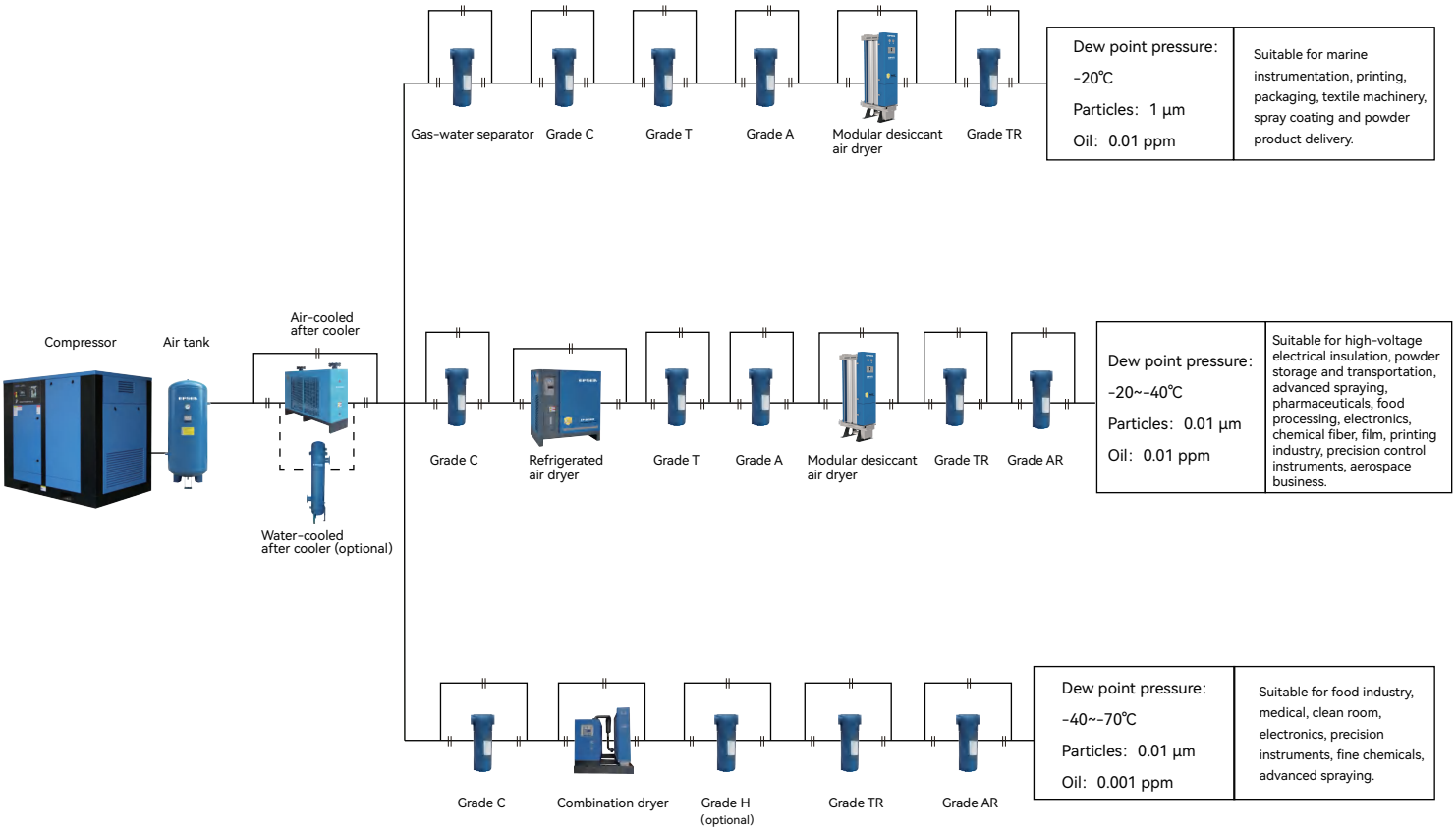

Automobile manufacturing


Textile industry

Advanced coating


Medical and pharmaceutical

Related industry applications and modular dryer configuration reference



CONTAMINANTS AND PURITY CLASSES ACCORDING TO ISO 8573:1-2010

Level	Compressed air purity level of particles Maximum particle size per cubic meter as a function of particle size, db			Moisture content Pressure dew point	Total oil content Including oil vapor mg/m³
	0.1μm<d≤0.5μm	0.5μm<d≤1.0μm	1μm<d≤5.0μm		
0	In accordance with the requirements specified by the equipment user or supplier, the requirements are higher than the first				
1	≤20000	≤400	≤10	≤-70℃	≤0.01mg/m³
2	≤400000	≤6000	≤100	≤-40℃	≤0.1mg/m³
3	—	≤90000	≤1000	≤-20℃	≤1mg/m³
4	—	—	≤10000	≤+3℃	≤5mg/m³
5	—	—	≤100000	≤+7℃	—
6	—	—	—	≤+10℃	—

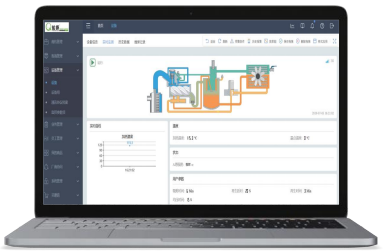
Intelligent IoT (optional)

EPSEA intelligent dryer, a device that can "talk"

FEATURES:

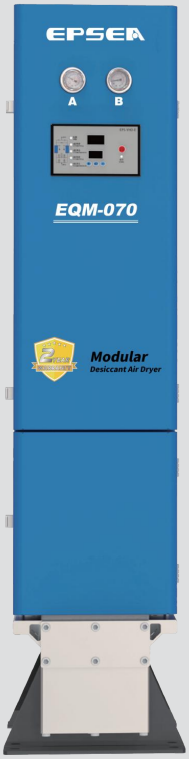
The system can monitor the device real-time running data 24 hours a day.

Real-time collection of equipment parameters and analysis. In case of failure, you can check the historical operation status of each parameter of the equipment to provide a basis for fault diagnosis, reduce maintenance time and shorten downtime.



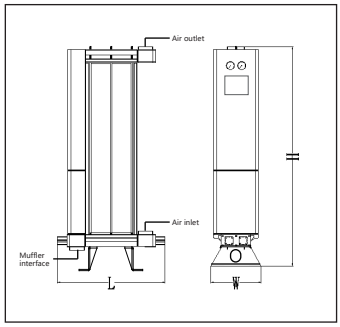
Dew point meter (with optional): Dew point meter adopts international famous brand - Vaisala or Michell. It can display dew point temperature online, linked with EPSEA self-developed control program, -20℃~-70℃ is optional according to onsite working condition.

INNOVATIVE TECHNOLOGY / PATENTED PRODUCTS / HIGH-TECH PRODUCTS ----MODULAR DESICCANT DRYER



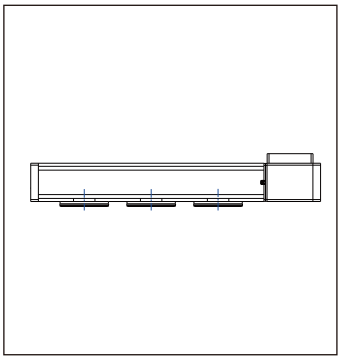
The EPSEA series modular desiccant dryer is a new type of desiccant-dryer by EPSEA company independent research and development. this dryer adopts aluminum alloy box structure， which broke through the traditional double tower design, with the features of elegant appearance and the volume is only about half of the double tower dryer. Scientific fluid distribution design make the gas is uniformly passed through the adsorption chamber at a high speed to avoid the tunneling effect of the gas, thereby maximizing the adsorption efficiency, and effectively reducing the amount of the adsorbent used, reducing the regeneration gas consumption, and saving the user the use cost and the maintenance cost.

The adsorption chamber of the dryer is treated with anti-oxidation and anti-corrosion treatment, avoid the carbon steel pipeline rust to bring the gases secondary pollution,to ensure the quality of compressed gas;It is equipped with international famous brand of adsorbent and pneumatic components, standard unified structural parts and scientific sealing design to ensure continuous and stable compressed air for users.



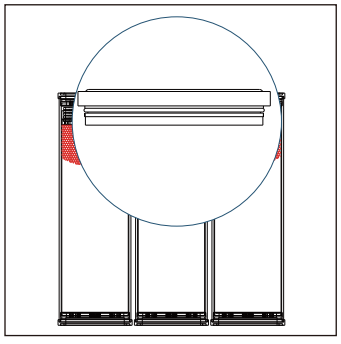
Advantages of shape and structure
(Patent No.:ZL201630516842.2)

EPSEA modular adsorption dryer adopts aluminum alloy cavity modular structure, with beautiful appearance, which breaks through the traditional twin tower type's shape design, and the volume is only about half of the traditional dryer. The modular construction allows for greater flexibility, which saves room space and allows a separate dryer to be placed on the shop floor for dry air supply while keeping the plant clean.



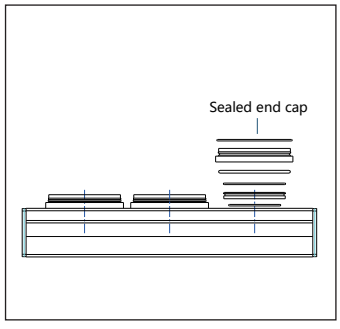
Overall layout advantage
(Patent No.: ZL 201820620740.9)

The multi-pipe design of adsorption cavity make the body more compact and reasonable. Scientific fluid distribution design make the gas is uniformly passed through the adsorption chamber at a high speed to avoid the tunneling effect of the gas, solves the problems of low adsorption efficiency and fast adsorption rate of adsorbent caused by unbalanced airflow distribution in the traditional twin-tower adsorption tank, make the adsorbent full adsorption the moisture in compressed air, anti-oxidation corrosion resistance and structure parts durable, avoid the carbon steel pipeline rust to bring the gases secondary pollution. So the compressed air will more clean, and the dew point more stable.



Core efficiency advantage
(Patent No.: ZL201621149318.7)

The adsorption chamber consists of adsorbent tube, adsorbent, diffusion stencil, sealing material, spring pressing device and a connecting member. and adopts a blizzard-type filling technique and is filled by a high-frequency vibrating filling machine. The addition of a unique spring-loading device allows the adsorbent to be packed more tightly, eliminating the gap between the adsorbent and the end cap, which not only extends the life of the adsorbent, but also maximizes adsorption efficiency and ensures that the compressed air is drier.



Stable performance advantage
(Patent No.: ZL201621155071X)

Each set of modules has a separate diffuser to ensure uniform distribution of airflow, allowing each adsorbent to exert maximum adsorption energy; the new sealed end cap consists of an outer cover and an inner cover, with a double-end cover. The channel seal performs all-round sealing protection to effectively prevent air leakage, improve the quality of compressed air and enhance the service life.

ARE YOU STILL USING A TRADITIONAL TWIN TOWER DRYER?

DISADVANTAGE OF TRADITIONAL TWIN TOWER DRYER:

- The distribution of a single diffuser is prone to produce dead angle adsorbents that cannot be fully utilized;
- Large size and large space;
- Pressure vessels must be tested regularly, which is time consuming and laborious;
- Carbon steel material is easy to rust, which is easy to cause secondary pollution of compressed air;
- It takes time and effort to replace the adsorbent;
- Use stability to float up and down;
- The adsorbent is prone to tunneling effects, resulting in unstable dew point;

ADVANTAGE OF MODULAR DRYER:

- The shunt technique is fully utilized for adsorption on average.
- Small size for a variety of applications;
- No need for pressure vessel testing, saving users time and time;
- The cavity is made of aluminum alloy to ensure the quality of compressed air, suitable for the food and pharmaceutical industry;
- The adsorption chamber adopts a pipeline design to make the fuselage more compact and reasonable, and the volume is smaller and lighter;
- Blizzard filling technology, spring compression device to avoid the tunneling effect of the adsorbent, Thus making the dew point more stable;

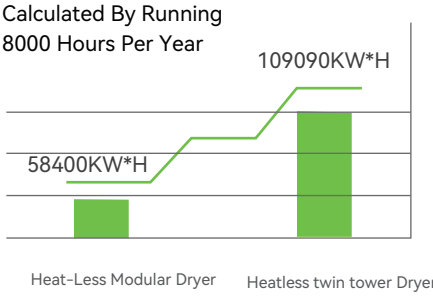
Choosing a dryer is not only about price, but also about the energy consumption, cost of use, stability and compressed air quality.

Take the processing capacity of 14Nm³/min as an example, calculate the total energy consumption by running 8000 hours a year.

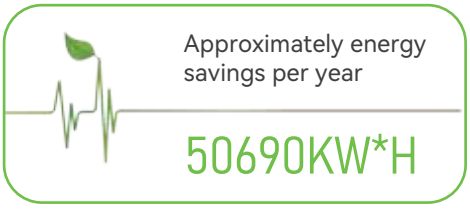
Type	Capacity	Dimensions (L、W、H) mm	Adsorbent weight	Dew point	Cycle	Average regener-ation air consumption	Conversion power consumption	Total annual energy consumption
Modular adsorption dryer	14m³/min	1156X400X1640	112kg	-20~-40℃	10	8%	7.3KW	58400kW*H
Twin tower adsorption dryer	14m³/min	1085X940X2184	225kg	-20~-40℃	12	15%	13.6KW	109090kW*H

Note: 1. 1HP air compressor can produce 0.1155Nm³/min compressed gas (industry standard), 1HP=0.75KW. At 8,000 hours per year.
2. Angry conversion power consumption = air consumption × capacity × 0.75/0.1155
3. The above data is calculated under the standard conditions of 0.7 MPa and intake temperature of 38 ℃.

Calculated By Running 8000 Hours Per Year



Taking the processing capacity of 14Nm³/min module machine as an example



HEAT-LESS REGENERATIVE MODULAR DESICCANT DRYER

Heatless desiccant dryers are the most reliable type of desiccant dryer available and have long been the dryer of choice for many industries and applications. They are simple, reliable and cost-effective for a wide range of compressed air purification systems and are often safe and viable.

EPSEA heatless compressed air dryers provide clean, oil-free and dry compressed air in accordance with all editions of ISO8573-1, the international standard for compressed air quality. They are energy efficient and use a modular construction making them less than half the size of conventional dryers.

Working principle

EPSEA Heat-less modular desiccant dryer consist of multiple high strength aluminum cavity,each cavity is divided into two chambers， each cavity filled with adsorbent that make the wet compressed air achieve dry. When one set cavity working, the other corresponding cavity will use the regeneration way of variable pressure adsorption to achieve regenerate. When regenerating, a part of dry compressed air from work pressure expansion to atmospheric pressure, then go through the water-saturation adsorbent, and take away the moisture, make the absorbent regeneration.If equipped with the series of refrigerated dryer,cyclone separator and precision filter will strengthen the running performance and reliability.

Features

1. More clean compressed air - Low dew point

Modular adsorption dryer generally use aluminum alloy and stainless steel bolts. It helps perfectly to avoid secondary pollution of carbon steel rust in contact with compressed air. The high utilization of the machine design allows every desiccant in full use and ensure the equipment in constant and stable pressure dew point. We make compressed air more clean to solve customers' worry about gas quality problem in production.

2. Low cost compressed air - Low loss consumption

The modular dryer changes the traditional machine structure to make the volume more compact, with each module having a separate diffusion function. The high-quality adsorbent combined with self-developed intelligent control method can minimize the consumption of regeneration gas, achieve more energy-saving effects, and greatly reduce the cost of use for users.

3. Constant and stable compressed air - Long service life

We use pneumatic components of global reputed brands as a guarantee .More scientific structure and sealing design,standard construction parts in uniform as well as anti-oxidation and anti-corrosion treatment are jointly contribute to its 30-year service.EPSEA people stick to quality-based production idea to provide customers more lasting and stable compressed air.

Technical Indicators

Standard condition

Inlet air temperature	≤38℃	Ambient temperature	≤38℃	Working pressure	0.7MPa

The scope of work

Max inlet air temperature	50℃	Ambient temperature	45℃	Working pressure	0.4-1.0MPa

Technical indicators

Pressure dew point	-20℃~-40℃	Pressure loss	≤0.021MPa

When Not Equipped With Refrigerated Air Dryer

CFP: Pressure correction coefficients

The lowest pressure of inlet air	MPa	0.4	0.5	0.6	0.7	0.8	0.9	1.0
	CFP	0.63	0.75	0.88	1.00	1.13	1.25	1.38

CFT: Temperature correction coefficients

The highest temperature of inlet air	℃	25	30	38	40	45	50
	CFT	1	1	1	0.9	0.68	0.53

CFIDP: Inlet Dew Point Correct Factor (W/T or W/Refrigerant Dryer)

Inlet Pressure Dewpoint	℃	10	38
	CFIDP	1.0	0.67

Without cold drying machine:
If the temperature of the compressed air intake is more than 5℃ higher than the ambient temperature, a compressor must be added for post-cooling.
A compressed air storage tank should be used as a wet tank.
Prior to the drying machine, the compressed air must be equipped with a gas-liquid separator and a precision filter to remove liquid water and oil.
To prevent cooling and water extraction, it is important to position gas-liquid separators and precision filters in close proximity to the drying machine.

Choose the smallest pressure correction coefficients of dryer（CFP）(when choose the smallest working pressure, need to consider the pressure loss of front equipment in the system)
Choose the highest inlet temperature correction coefficients of dryer（CFT）
Choose the dew point correction coefficients
Calculate the flow rate of need to meet for the dryer as below:

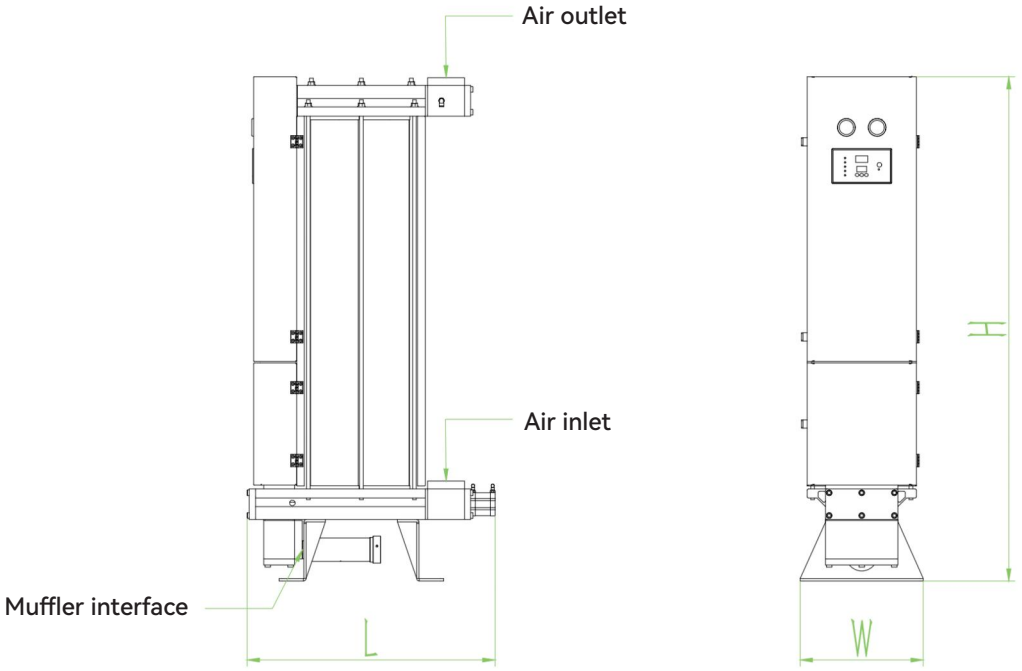
$$\frac{\text{Inlet flow rate}}{\text{CFTxCFPxCFIDP}} = \text{The smallest flow rate need to meet for the dryer}$$

Device selection calculation example:
If the actual capacity is 10m3/min, the inlet air temperature is 40℃, the pressure is 0.4Mpa, and the pressure dew point is -20~-40℃.

$$\frac{10}{0.9\times0.63\times1} = 17.6\ m^3/min$$

The corresponding model is EQM-175 or above

Dimensional chart of heat-less modular desiccant dryer



Parameter sheet of heatless regenerative modular dryer

MODEL	FLOWRATE (m^3/min)	INLET/OUTLET	Dimensions (mm)			POWER SUPPLY (V)	WEIGHT(kg)
			LENGTH	WIDTH	HEIGHT		
EQM-005	0.5	Rp3/4	350	303	550	220	35
EQM-010	1	Rp1	350	324	1100	220	50
EQM-015	1.5	Rp1	350	324	1400	220	60
EQM-025	2.5	Rp1	350	324	1700	220	70
EQM-035	3.5	Rp1-1/2	631	400	1640	220	142
EQM-070	7	Rp1-1/2	806	400	1640	220	202
EQM-105	10.5	Rp2	981	400	1640	220	262
EQM-140	14	Rp2	1156	400	1640	220	322
EQM-175	17.5	Rp2-1/2	1331	400	1640	220	382
EQM-210	21	Rp2-1/2	1506	400	1640	220	442
EQM-245	24.5	Rp2-1/2	1681	400	1640	220	502
EQM-280	28	Rp2-1/2	1791	400	1640	220	555
EQM-350	35	DN80	1331	947.5	1627	220	790
EQM-420	42	DN100	1506	947.5	1627	220	915
EQM-490	49	DN100	1681	947.5	1627	220	1035
EQM-560	56	DN125	1791	947.5	1627	220	1185
EQM-630	63	DN125	1506	1422.5	1625	220	1186
EQM-735	73.5	DN125	1681	1422.5	1625	220	1362
EQM-840	84	DN150	1791	1422.5	1625	220	1525

Select the cooler model from the table based on the minimum airflow that the cooler should meet to ensure that the selected model's flow is at least equal or larger.

VACUUM ASSISTED MODULAR DESICCANT AIR DRYER

Working principle

Vacuum modular desiccant air dryer uses a vacuum pump to vacuum the adsorbent bed in the adsorbent cartridge, taking advantage of the principle that negative pressure can hold more water vapour, and using the smallest possible amount of regeneration gas to take away as much water as possible. The design of this machine is also based on the regeneration of the adsorbent in the form of vacuum regeneration under variable pressure, which not only ensures the stability of the dew point, but also greatly reduces the waste of the finished gas.

Advantages of vacuum assisted modular desiccant air dryer:

1、 Less gas consumption, significantly reducing compressed air consumption by about 80%.

2、 Regeneration is more bottom-cutting, dew point is better and more stable.

3、 PLC full-automatic switching, panel display real-time data,more intuitive, more intelligent.

Technical Indicators

Standard working condition

Intake temperature	≤38℃	Ambient temperature	≤38℃	Working pressure	0.7MPa

Scope of Work

Max intake temperature	50℃	Max ambient temperature	45℃	Working pressure	0.4-1.0MPa

Technical index

Pressure dew point	-20℃~-40℃	Pressure loss	≤0.021MPa

Principle process and description

1、Tower A adsorption, Tower A pressure relief

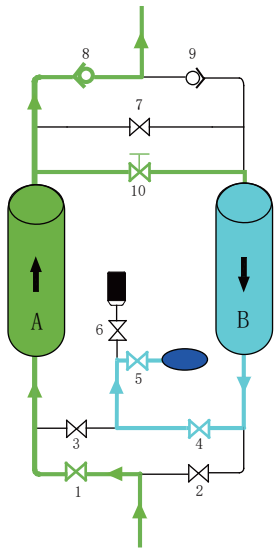
Compressed air enters into tower A through valve 1 for adsorption, and then the dried gas is sent to the point of use through valve 8. At the same time, valve 4 and valve 6 open, tower B pressure relief, to ensure that the next step of the vacuum regeneration is carried out smoothly.

2、Tower A adsorption, Tower B vacuum regeneration

Compressed air enters into tower A through valve 1 for adsorption, and then the dried gas is sent to the point of use through valve 8. At the same time, valve 6 is closed, valve 5 is opened, the vacuum pump is energized and started, vacuuming tower B to take away the moisture in the desiccant and regenerate more thoroughly.

3、Tower A adsorption, Tower B pressurizes

Compressed air enters into tower A through valve 1 for adsorption, and then the dried gas is sent to the gas point through valve 8. At the same time, the vacuum pump is disconnected, valve 4 and valve 5 are closed, valve 7 is opened, and the dried gas from tower A enters tower B for pressure charging. After the end of charging pressure, it turns to adsorption in tower B, pressure relief, vacuum regeneration and pressure charging in tower A. The process of tower A and B is automatically switched by PLC to ensure the continuous supply of finished gas.



VACUUM ASSISTED

Vacuum assisted modular desiccant air dryer parameter table

Model	Air capacity (m³/min)	Inlet/Outlet	Dimension (mm)			Vacuum pump power (kW)	Power supply (V)	Weight(kg)
			Length	Width	Height			
EPS-035MZK	3.5	Rp1-1/2	1100	740	1930	1.25	380	300
EPS-070MZK	7	Rp1-1/2	1100	910	1930	1.85	380	370
EPS-105MZK	10.5	Rp2	1100	1100	1930	4	380	460
EPS-140MZK	14	Rp2	1100	1250	1930	4	380	530
EPS-175MZK	17.5	Rp2-1/2	1160	1411	1930	5.5	380	640
EPS-210MZK	21	Rp2-1/2	1160	1586	1930	7.3	380	730
EPS-245MZK	24.5	Rp2-1/2	1160	1761	1930	7.3	380	810
EPS-280MZK	28	Rp2-1/2	1160	1871	1930	7.3	380	880

COMBINATION DRYER

The combination dryer comprises a refrigerated air dryer, a main pipeline filter, an efficient oil removal filter, and a modular adsorption air dryer. The compressed air first enters the refrigerated air dryer to remove water, reducing the dew point to below 10℃. It then passes through two groups of precision filters to remove oil, reducing the residual oil content to below 0.01ppm. Finally, it enters the modular air dryer for thorough drying. As the compressed air is treated and cooled before entering the modular dryer, the dew point temperature is guaranteed to be between -40 ~ -70℃. Therefore, the combined air dryer is more suitable for conditions with strict dew point requirements.

Working condition:

Inlet air temperature: 45 ° C, ambient temperature: 38 ° C

Technical indicators:

Pressure dew point: : -40 ℃, pressure loss: ≤0.08MPa

The scope of work:

Inlet air temperature: ≤60 ℃, ambient temperature: 2-45 ℃,

working pressure: 0.4-1.0 MPa

Parameter sheet of combination dryer

MODEL	AIR CAPACITY (m^3/min)	INLET/OUTLET	Dimensions (mm)			POWER SUPPLY(V)	WEIGHT(kg)
			LENGTH	WIDTH	HEIGHT		
EP-015AZM	1.5	R1，Rp1	1200	820	1200	220	230
EP-025AZM	2.5	R1，Rp1	1200	820	1338	220	240
EP-035AZM	3.5	R1-1/2，Rp1-1/2	1300	920	1930	220	360
EP-070AZM	7	R1-1/2，Rp1-1/2	1300	1120	1930	220	470
EP-105AZM	10.5	DN50，Rp2	1550	1420	1930	220	615
EP-140AZM	14	DN65，Rp2-1/2	1550	1420	1930	380	700
EP-175AZM	17.5	DN65，Rp2-1/2	1600	1620	1930	380	880
EP-210AZM	21	DN80，Rp3	1600	1620	1930	380	1010
EP-245AZM	24.5	DN80，Rp3	1600	1700	1930	380	1100
EP-280AZM	28	DN80，Rp3	1600	1800	1930	380	1150
EP-350AZM	35	DN100	2750	1920	2461	380	1950
EP-420AZM	42	DN100	2750	1920	2461	380	2150
EP-490AZM	49	DN125	3100	2130	1917	380	2550
EP-560AZM	56	DN125	3100	2180	1917	380	2750
EP-630AZM	63	DN125	3700	2100	2550	380	3100
EP-735AZM	73.5	DN125	3700	2100	2700	380	3550
EP-840AZM	84	DN150	3700	2100	2800	380	4250

Select the cooler model from the table based on the minimum airflow that the cooler should meet to ensure that the selected model's flow is at least equal or larger.

AIR-COOLED AFTER COOLER

EP-CBA series high-efficiency after cooler can be used in petroleum, chemical, textile, metallurgy, electronics, telecommunications and other industrial sectors. Pneumatic control, pneumatic instrumentation, pneumatic components and process air in various industries to provide ⩽ 40 °C and pulse stability of the compressed air. This series of high-efficiency after cooler is based on summarizing the existing compressed air cooling methods at home and abroad, combining with the supporting layout of the air source device to produce. This series of high-efficiency after cooler is a new product which is produced by combining the supporting layout of air source device. It has good cooling effect, simple process, it is characterized by good cooling effect, simple process, low investment, convenient use and maintenance, fine volume and light weight.

Working conditions and technical indicators

Inlet pressure: 0.6~1.0MPa, Inlet temperature: ⩽100℃

Outlet temperature: ⩽45℃, Environmental temperature: ⩽40℃, Initial pressure drop: ⩽0.03MPa

Inlet temperature (℃)		60	70	80	90	100
Environmental temperature (℃)	32	1.41	1.22	1.06	0.93	0.85
	38	1.33	1.15	1.00	0.88	0.80
	40	1.28	1.10	0.96	0.84	0.77
	45	0.94	0.82	0.71	0.62	0.57

Pressure Coefficient Comparison Chart for use with models with pressures up to 1.0 MPa

Air pressure (MPa)	0.2	0.29	0.39	0.49	0.59	0.69	0.78	0.88	0.93	0.98
Pressure coefficient	0.67	0.73	0.8	0.87	0.93	1	1.07	1.13	1.16	1.2

The above chart parameters for the pre-cooler selection calculation parameters

calculation method: $\frac{\text{Exhaust volume}}{\text{Temperature coefficient} \times \text{Pressure coefficient}}$ =Match Size

Parameter table for air-cooled after coolers

MODEL	AIR CAPACITY (m^3/min)	INLET/OUTLET	Dimensions (mm)			WEIGHT(kg)
			LENGTH	WIDTH	HEIGHT	
EP-020CBA	2	R1	650	280	590	29
EP-038CBA	3.8	R1-1/2	950	340	670	34
EP-069CBA	6.9	R1-1/2	1000	330	790	53
EP-110CBA	11	R2	1100	330	900	68
EP-140CBA	14	R2-1/2	1100	330	1000	73
EP-180CBA	18	R2-1/2	1400	330	800	82
EP-220CBA	22	DN80	1450	350	900	91
EP-280CBA	28	DN80	1500	470	1000	105
EP-320CBA	32	DN80	1600	470	1000	120
EP-380CBA	38	DN100	1600	470	1005	128
EP-460CBA	46	DN100	1800	470	1005	153
EP-550CBA	55	DN125	1800	470	1235	188
EP-670CBA	67	DN150	2100	470	1370	246
EP-750CBA	75	DN150	2200	500	1510	278

Select the cooler model from the table based on the minimum flow rate that the cooler should meet, making sure that the selected model has a flow rate at least equal to or greater than this.

WATER-COOLED AFTER COOLER

EP-CBW series high efficiency after cooler can provide compressed air with ≤40℃ and pulse stability for pneumatic control, pneumatic instruments, pneumatic components and process gas used in petroleum, chemical, textile, metallurgy, electronics, telecommunications and other industrial sectors. This series of high efficiency after cooler is a new product produced on the basis of summarizing the existing compressed air cooling methods at home and abroad, combined with the matching layout of the air source device. It has the characteristics of good cooling effect, simple process, less investment, easy use and maintenance, small volume and light weight.

Working conditions and technical indicators

Inlet pressure	0.6~1.0MPa	Influent temperature	≤32℃
Inlet temperature	≤140℃	Influent pressure	0.2~0.4MPa
Outlet temperature	≤45℃	Initial pressure drop	≤0.003MPa

Parameter table for water-cooled after cooler

MODEL	AIR CAPACITY (m^3/min)	Cooling water circulation (m^3/h)	Air Pipe Caliber	Cooling Water Air Pipe Size	Dimensions (mm)		WEIGHT (kg)
					CALIBRE	HEIGHT	
EP-020CBW	2.0	0.5	G1	G1/2	ф89	1055	29
EP-026CBW	2.6	1.0	G1	G1	ф108	1305	34
EP-038CBW	3.8	1.0	G1-1/2	G1	ф108	1305	34
EP-069CBW	6.9	1.5	G1-1/2	G1	ф159	1330	58
EP-110CBW	11.0	3.0	G2	G1-1/2	ф159	1780	73
EP-140CBW	14.0	3.0	G2-1/2	G1-1/2	ф159	1780	73
EP-180CBW	18.0	4.5	G2-1/2	G2	ф219	1657	110
EP-220CBW	22.0	6.0	DN80	G2	ф219	1657	125
EP-280CBW	28.0	9.0	DN80	G2	ф273	1663	182
EP-320CBW	32.0	9.0	DN80	G2	ф273	1663	182
EP-380CBW	38.0	10.5	DN100	G2	ф273	2023	205
EP-460CBW	46.0	12.0	DN100	G2-1/2	ф273	2023	213
EP-550CBW	55.0	15.0	DN125	G2-1/2	ф325	2087	218
EP-670CBW	67.0	18.0	DN150	G2-1/2	ф325	2087	200
EP-750CBW	75.0	20.0	DN150	G2-1/2	ф325	2200	200
EP-850CBW	85.0	22.5	DN150	G2-1/2	ф325	2200	200
EP-950CBW	95.0	24.0	DN200	G2-1/2	ф325	2287	200
EP-1100CBW	110.0	30.0	DN200	DN80	ф362	2413	370
EP-1400CBW	140.0	35.0	DN200	DN100	ф412	2520	315
EP-1700CBW	170.0	45.0	DN200	DN100	ф412	2620	495
EP-2300CBW	230.0	60.0	DN250	DN100	ф462	2845	637
EP-2900CBW	290.0	75.0	DN250	DN125	ф512	2910	772
EP-3700CBW	370.0	90.0	DN300	DN125	ф512	3210	850

Select the cooler model from the table according to the minimum flow rate that the cooler should meet, making sure that the selected model has a flow rate that is at least equal to or greater than this one.

WATER SEPARATOR

The EP-WS series is a compressed air purification product that does not require a built-in filter element. It is installed at the front of the compressed air filter and protects the filter from large amounts of liquid from tanks and piping.

Working conditions and technical indicators

Maximum working pressure	Threaded separator 1.6MPa Flanged separator 1.0MPa
Maximum working temp	80℃
Minimum working temp	1.5℃
Pressure difference	0.007MPa

Cyclone air-water separator parameter table

MODEL	AIR CAPACITY (m^3/min)	INLET/OUTLET	Dimensions (mm)		WEIGHT (kg)
			HEIGHT	WIDTH	
EP-026WS-III	2.6	Rc1/2	251	100	1.25
EP-038WS-III	3.8	Rc3/4	251	100	1.2
EP-069WS-III	6.9	Rc1	320	132	3
EP-110WS-III	11	Rc1-1/2	320	132	2.8
EP-180WS-III	18	Rc2	536	165	6.45
EP-280WS-III	28	Rc2-1/2	536	165	6.15
EP-460WS	46	Rc2-1/2	582	215	8.1
EP-550WS	55	Rc3	582	215	7.9
EP-670WOS	67	DN125	1329	ϕ325	180
EP-750WOS	75	DN125	1329	ϕ325	180
EP-850WOS	85	DN125	1329	ϕ325	180
EP-950WOS	95	DN125	1329	ϕ325	180
EP-1100WOS	110	DN150	1390	ϕ377	200
EP-1400WOS	140	DN150	1390	ϕ426	205
EP-1700WOS	170	DN200	1690	ϕ480	320
EP-2300WOS	230	DN200	1790	ϕ562	400

HIGH EFFICIENCY OIL REMOVER

The EP-HWOS series products use ultra-fine fiber as the main filter material and employ cyclone separation, pre-filter and fine filter, and coagulation fine filter for three-stage purification. When used with an oil-lubricated compressor, it produces gas of similar quality to that of an oil-free lubricating compressor, with high dust removal capacity and some dehumidification and drying ability. Which widely used in pneumatic instruments, automatic control and food, pharmaceutical, chemical, textile, petroleum, spray paint, telecommunications, metallurgy, rubber and other industries.

Working conditions and technical indicators

Inlet air pressure	0.6~1.0MPa	Initial pressure drop	≤0.02MPa
Inlet air temperature	1.5℃~50℃	Oil content of outgas	≤0.01ppm

Parameter sheet of high efficiency deoiler

MODEL	AIR CAPACITY (m^3/min)	INLET/OUTLET	HEIGHT (mm)	TUBE DIAMETER (mm)	WEIGHT (kg)
EP-020HWOS	2.0	Rp1	990	φ133	36
EP-026HWOS	2.6	Rp1	990	φ133	36
EP-038HWOS	3.8	Rp1-1/2	1180	φ133	39
EP-069HWOS	6.9	Rp1-1/2	1180	φ133	39
EP-085HWOS	8.5	Rp2	1672	φ219	88
EP-110HWOS	11	Rp2	1672	φ219	88
EP-140HWOS	14	Rp2	1672	φ219	88
EP-180HWOS	18	DN65	2032	φ219	105
EP-220HWOS	22	DN65	2032	φ219	105
EP-280HWOS	28	DN80	1875	φ273	90
EP-330HWOS	33	DN80	1875	φ273	100
EP-380HWOS	38	DN100	2025	φ273	120
EP-460HWOS	46	DN100	2025	φ273	130
EP-550HWOS	55	DN125	2025	φ273	140
EP-670HWOS	67	DN125	2090	φ325	200
EP-750HWOS	75	DN125	2090	φ325	200
EP-850HWOS	85	DN125	2090	φ325	200
EP-950HWOS	95	DN125	2090	φ325	200
EP-1100HWOS	110	DN150	2117	φ426	230
EP-1400HWOS	140	DN200	2117	φ426	240
EP-1700HWOS	170	DN200	2117	φ426	250
EP-2300HWOS	230	DN200	2130	φ480	290

LINE FILTER

Compressed air filter parameter table

Model	Flow Rate (m^3/min)	Inlet/Outlet	Dimensions(mm)		Filter Element		Weight (kg)
			Height	Width	Type	QTY	
EP-001G-IV	1.5	Rc1/2	251	100	001-IV-*	1	1.2
EP-001G-IV	1.5	Rc3/4	251	100	001-IV-*	1	1.1
EP-002G-IV	2	Rc3/4	301	100	002-IV-*	1	1.5
EP-003G-IV	3	Rc1	320	132	003-IV-*	1	2.6
EP-004G-IV	4	Rc1-1/2	320	132	004-IV-*	1	2.5
EP-007G-IV	7	Rc1-1/2	420	132	007-IV-*	1	2.8
EP-010G-IV	11	Rc2	536	165	010-IV-*	1	5.1
EP-014G-IV	14	Rc2-1/2	536	165	014-IV-*	1	4.8
EP-018G-IV	18	Rc2-1/2	531	215	018-IV-*	1	8.1
EP-022G-IV	22	Rc3	531	215	022-IV-*	1	8
EP-028G-IV	28	Rc3	696	215	028-IV-*	1	8.8
EP-033G-IV	33	Rc3	696	215	033-IV-*	1	9.2
EP-033F	33	DN80	1055	513	EP20+EP15	1+1	75
EP-038F	38	DN100	1120	513	EP20	2	75.5
EP-046F	46	DN100	1270	513	EP24	2	81.5
EP-055F	55	DN125	1100	565	EP20+EP15	2+1	105
EP-067F	67	DN125	1225	565	EP24+EP20	2+1	110
EP-075F	75	DN125	1263	657	EP24+EP20	1+3	136
EP-085F	85	DN150	1412	657	EP24	4	150
EP-095F	95	DN150	1288	706	EP24+EP20	2+3	165
EP-110F	110	DN150	1459	706	EP24	5	190
EP-130F	130	DN200	1355	780	EP24+EP20	3+4	220
EP-160F	160	DN200	1535	780	EP24	7	240
EP-180F	180	DN200	1438	830	EP24+EP20	6+3	360
EP-200F	200	DN200	1600	830	EP24	9	375
EP-250F	250	DN250	1580	930	EP24+EP20	8+4	400

Note: EP-001G to EP-033G are die-casting models, the materials are aluminum; all other models are welded and made of carbon steel. For more details, please contact us.

CUSTOMER CASE ON-SITE SHOOTING


EPSEA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www.epsea.com
info@epseagroup.com

Factory : FUJIAN EPSEA INDUSTRIAL CO., LTD.
Headquarters : GUANGDONG EPSEA INDUSTRIAL CO., LTD.

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