DREAM
Green energy shared Dream

STABLE | ENERGY-SAVING| CLEAN | AND EFFICIENT

Compressed air Purification equipment Post-processing

Dream(Shanghai) Compressor Co.,Ltd.

DREAM
Green energy, shared Dream

Dream (Shanghai) Compressor Co.,Ltd.

(International Sales &Operation Center)Room 316, 3rd Floor, Building 1, Lane 288, Rongxing Road, Zhongshan Street, Songjiang District, Shanghai

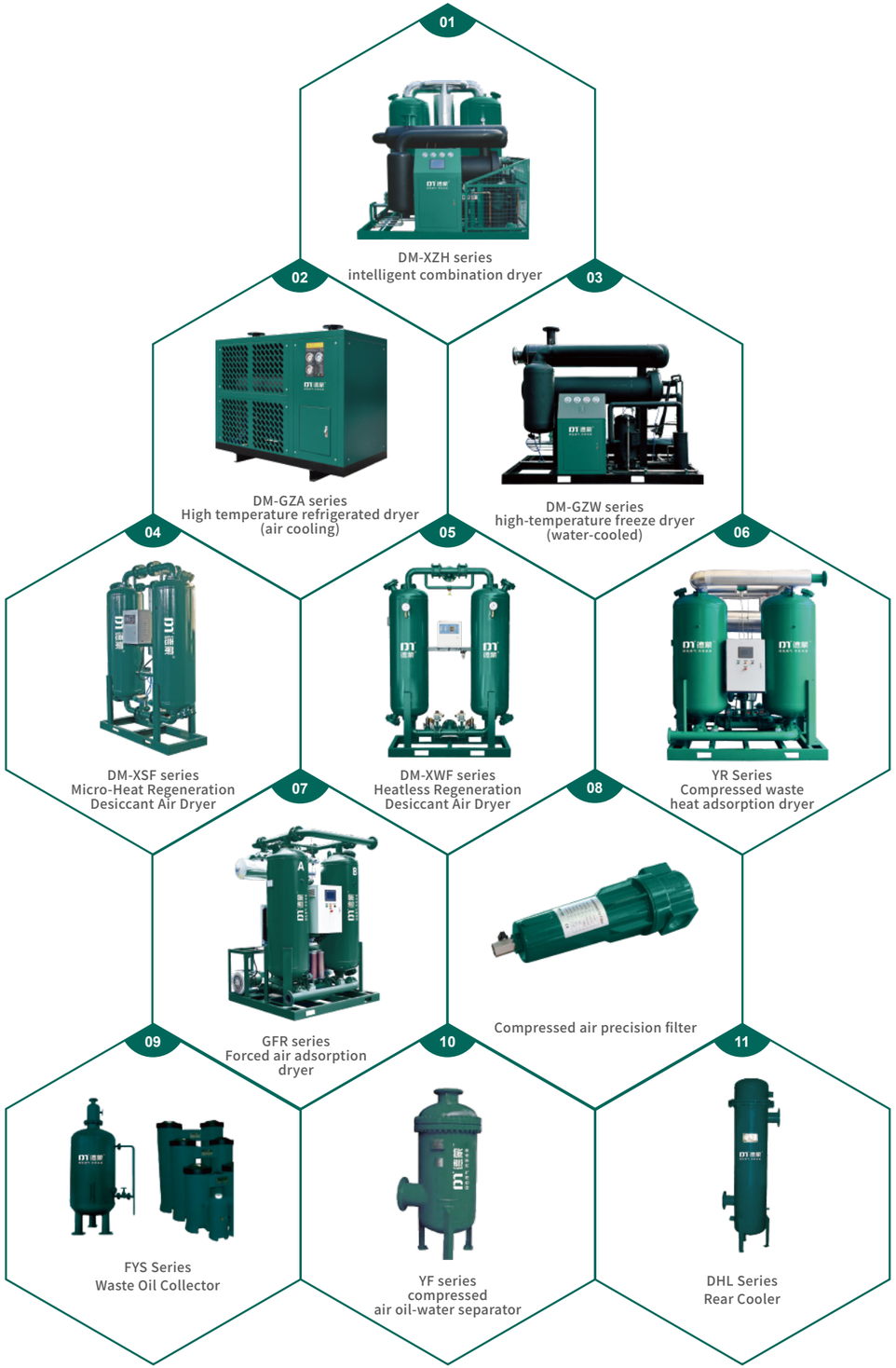
(Zhejiang Manufacturing Center) No. 916,Chuangzhi Road,Xindai Town, Pinghu City,Jiaxing City,Zhejiang Province

86-13671551445

sales@dmcomp.com

www.dreamcompressor.com
www.dmcomp.com

DREAM



GREEN ENERGY SHARED DREAM

Catalogue

ABOUT DREAM

45000 ㎡
factory area

100+ 项
Invention patents and honors

20+
Regional branches/subsidiaries

Dream (Shanghai)Compressor Co., Ltd. which established in Shanghai in 2011. It is a company specialized in designing,manufacturing and marketing of air compressors, is A high-tech enterprise that sells and provides system solutions.
It has won honors such as Shanghai Brand Cultivation Demonstration Enterprise, special new enterprise,energy-saving equipment contribution enterprise,high-tech achievement transformation project,etc. The products are widely used in new energy,chemical industry & chemistry,Electronics,textiles,brewing mill,laser cutting, medicine & food and other fields.
Based on concepts of stable,energy-saving,clean,efficiency,simple operation& maintenance ,DREAM insists on developing based on market demand and innovation. The company invests 10%-15% of its profits every year into R&D and the upgrading & optimization of products. Innovation is main driver for DREAM grow up. As manufacturer supplier of Air compressor system solutions, Our service cover client requirement analysis,site investigation,technical solution design,and project cost analysis,non-standard solution customization,solution demonstration and promotion. we provide exclusive compressed gas solutions based on project needs.
After development for 14+years，Dream has always adhered to the enterprise spirit of "One heart One Dream, striving for excellence",constantly innovating and pursuing excellence. Dream people continue to explore and innovate to meet customer needs and provide users with better products and service. Based in China,Dream's products has exported to wordwide countries successfully, mainly market as South Asia,South East Asia,Europe, Africa ,South America, North America, and CIS countries,footprints all over the world. Its excellent product performance and efficient service concept continue to create value for users.
Dream will be always your trust partner. We believe that you will experience our high-quality products and professional services,by working with us. Welcome to pursue dream and create better future with DREAM together!

DREAM CULTURE

Vision
To be a global leader in gas compression intelligent equipment and system solutions service provider

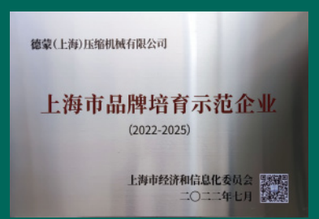
Mission
Make Industry Air More Stable, More Clean,More Efficient

Value
One Heart. One Dream. Professional. Focus. Innovative. Win-win.

DREAM

Enterprise honor

- High-tech enterprise
- Specialized in special new enterprises
- Energy-saving technology and equipment contributing enterprises
- Shanghai brand cultivation model enterprise
- CE Certificates
- EMC Certificates
- TUV Rheinland Class 0 Oil Free Certificates
- Germany TUV product safety certification
- GCCA product quality and safety certification
- ISO 9001,14001,45001



20+
City subsidiary

34 Provincial sales
service network

Adhering to the business philosophy of "market-oriented,customer-centric,technical support and service guarantee",Dream is committed to providing customers with high quality products and industry-leading services. With Shanghai as the center and 20 service outlets nationwide as the auxiliary,Dream covers 34 provinces and autonomous regions of China's sales and service network,dedicated to provide customers with better service.

Global service

Dream is committed to providing quality products and services on a global scale,and has conducted overseas operations in many countries and regions,including Southeast Asia,Europe,and the Americas,and has established strong partnerships in overseas markets. Our overseas agents have rich experience in cross-cultural communication and international vision,and are able to better understand and meet the needs of local customers and markets. In the future,we will continue to strengthen the development of overseas business,expand more overseas markets,and let China intelligent manufacturing shine on the international stage.

Dream Intelligent Manufacturing
Six core competencies

Solution

Air compressor energy saving expansion
Digital station house
Intelligent control
Whole station energy saving

Product

Oil-free air compressor
Oil-Injected screw air compressor
Portable Air Compressor
Air Treatment Equipment

Guarantee

Product quality assurance
Production cycle support
Product after-sales support
System engineering capability assurance
Capacity supporting measures

德蒙®
绿色用气 共享未来

Technology

Air compressor development technology
Automatic digital technology
Specialized application technology

Service

Full life cycle service
Performance pledge
19 national service outlets
Global delivery

Engineering

Gas station renewal capacity
Project management capability
Engineering design capability
Detail implementation ability

Full process cycle and service

We provide the whole process cycle service for customers to build gas stations or upgrade,covering compressed gas system research,evaluation,design,edge calculation,equipment installation,engineering installation,intelligent iot system control,equipment maintenance and so on.

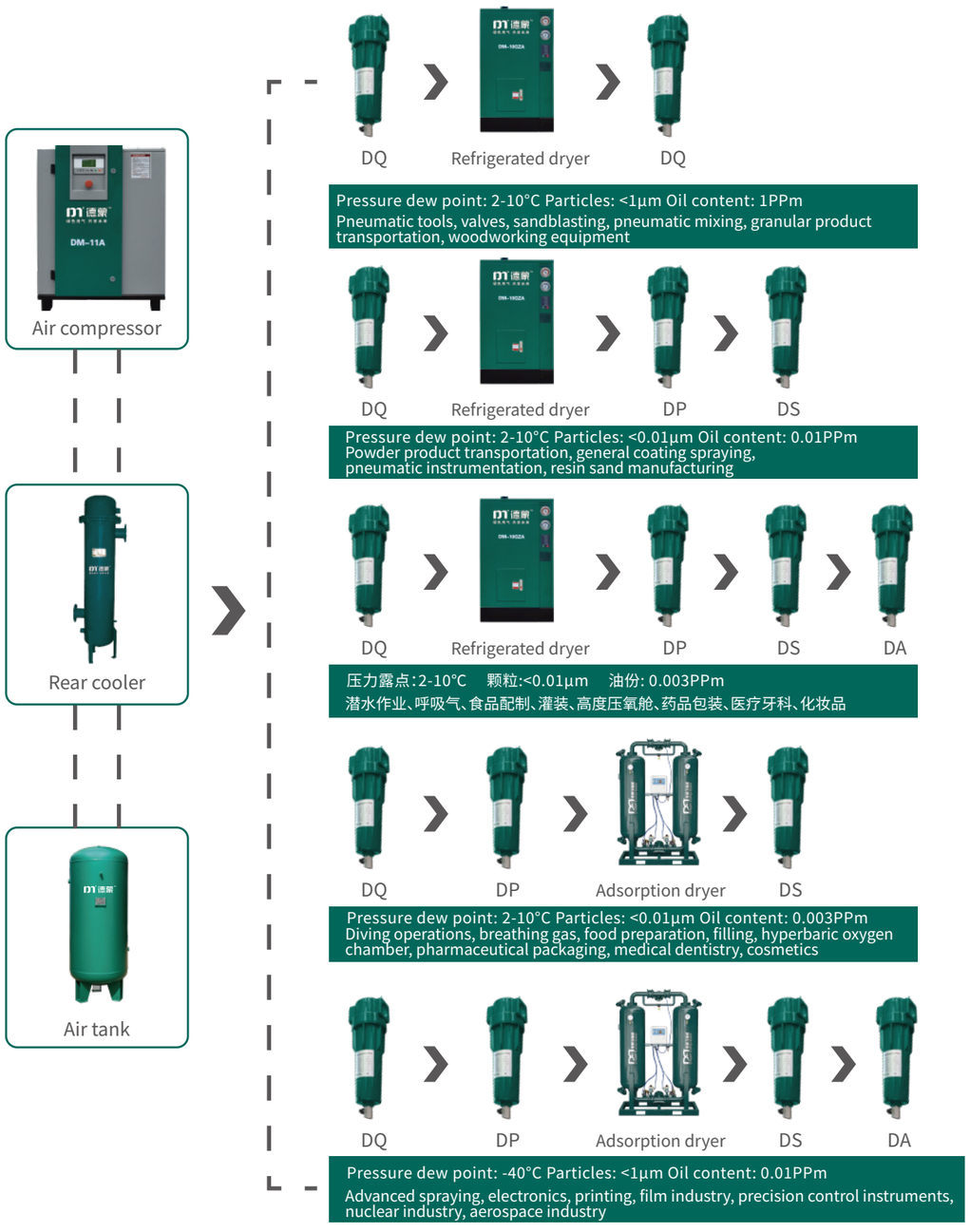
Service process

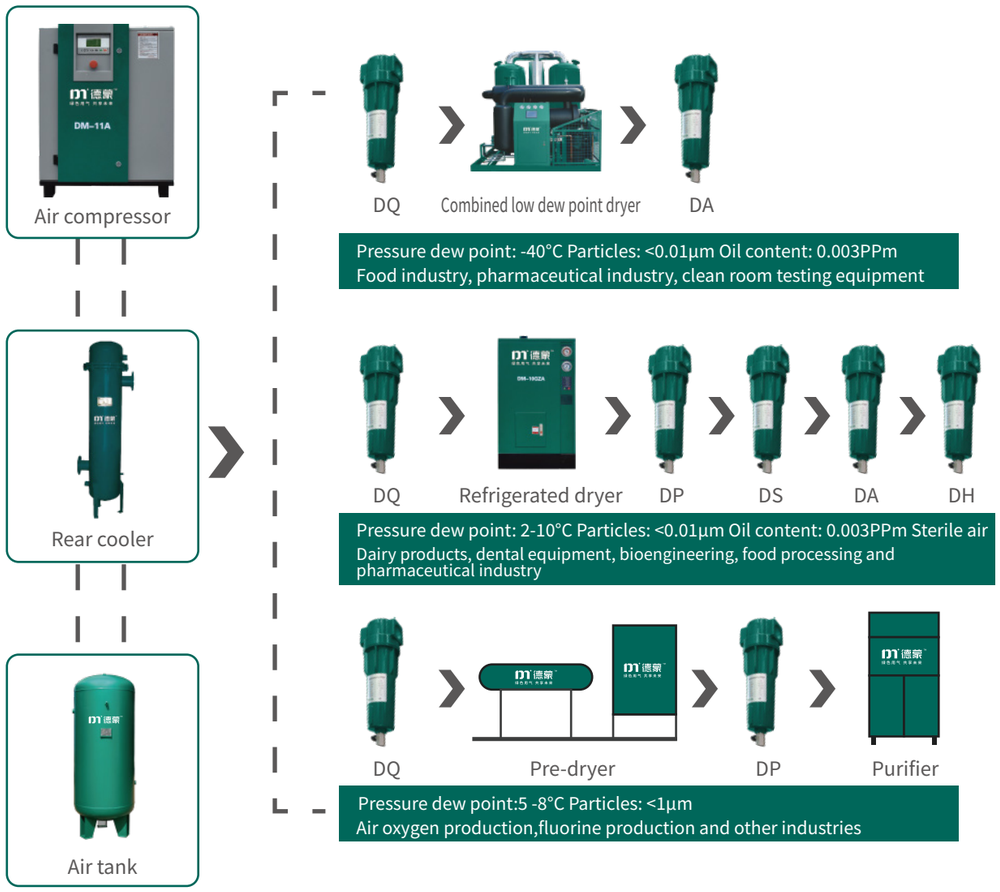
Compressed gas survey
Evaluation
Design
Accounting
Equipment installation
Engineering installation
Intelligent iot system control
Equipment maintenance

Performance pledge

Free pre-sale service
13 months free maintenance
Lifetime warranty
7*24 service
Regular inspection
Dedicated maintenance files

压缩空气配置图





The Dream series dryer meets the rated working conditions, inlet temperature 38°, inlet pressure 7kg/cm, relative humidity 100%, maximum negative 100%, continuous operation, and the outlet dew point will be guaranteed to reach the original set value. To correctly select a refrigerated dryer, you must consider the actual flow, pressure, temperature of the compressed air, as well as the ambient temperature and the required pressure dew point temperature. When the "pressure dew point" of the compressed air is below zero, the desiccant dryer is the preferred equipment for compressed air treatment.

A. The above configuration is only for reference, and the specific configuration can be adjusted accordingly according to the actual situation.

B. The cold dryer is generally installed after the rear cooler or buffer gas tank to prevent the machine from being impacted by pulse airflow and overloaded.

C. In order to reduce the pollution of the heat exchanger in the unit, a pre-main line filter should be configured at the front of the cold dryer.

D. A bypass valve should be installed at the inlet and outlet of the cold dryer

E. A gap of more than 1m should be left around the cold dryer for ventilation, heat dissipation and maintenance.

(Inlet pressure)：≤0.6~1.0Mpa
(Inlet temperature)：≤45℃
(Purge air):≤3~5℃
(Pressure dew point):-40℃~-70℃
(Cooling Water temperature)：≤32℃
(Pressure drop) :≤0.05Mpa

DM-XZH series

intelligent combination dryer

There is a stable outlet dew point and a lower and more stable pressure dew point. The large capacity of the desiccant ensures that the air and the desiccant have sufficient contact space to fully absorb water. Minimal regenerative air consumption. Long service life of adsorbent, unique design of removable stainless steel diffuser, uniform distribution of gas in the tower, to avoid the wear of adsorbent after ditch flow.

Integrated design of cold dryer and suction dryer

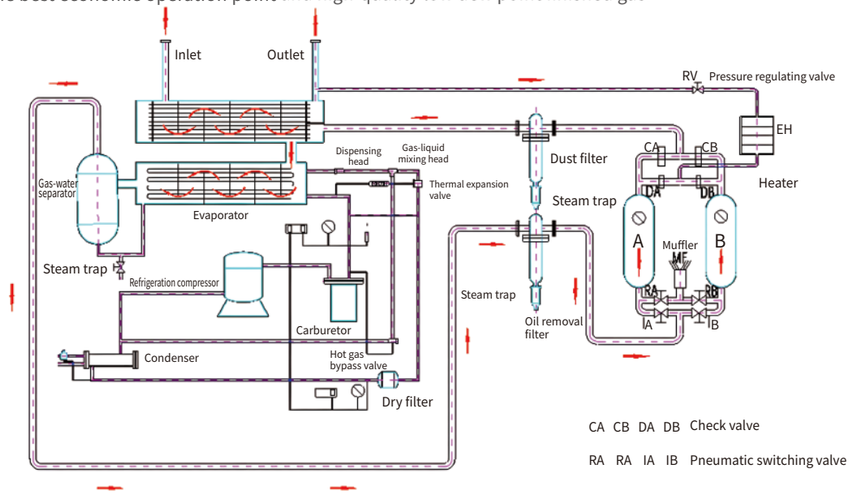
Small volume

No need to install intermediate pipelines

Lower pressure dew point for greater stability

Working Principle

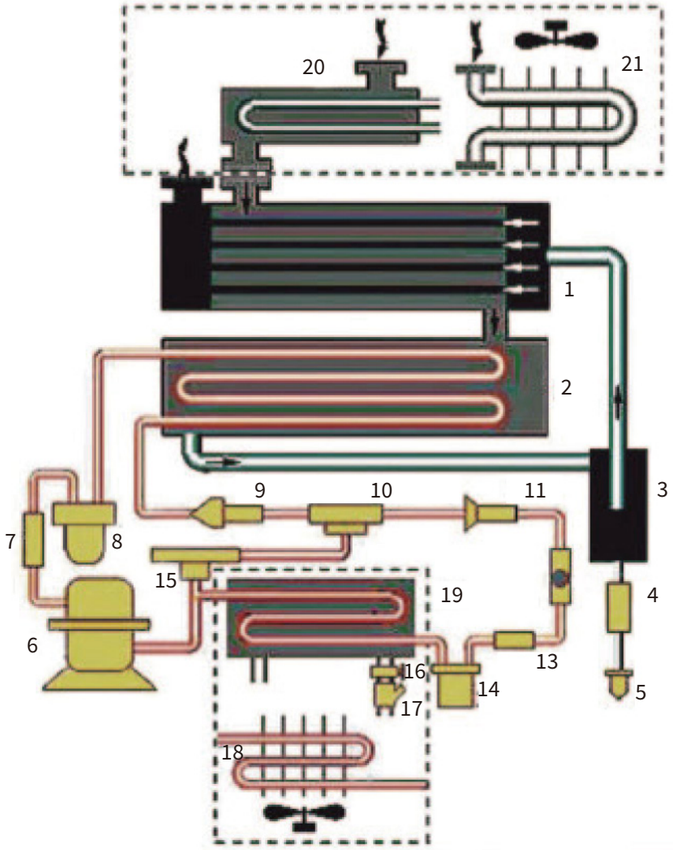
The combined low dew point dryer is composed of a refrigerated dryer and an adsorption dryer (heatless or heated) through reasonable pipe connection and volume matching. The refrigerated dryer has a strong dehydration capacity, low operating energy consumption, and no gas loss. Combined with the characteristics of the adsorption dryer that can achieve a lower dew point, the advantages of the two are maximized. Before the compressed air enters the adsorption dryer, it is pre-treated with a refrigerated dryer to remove a large amount of water in the refrigerated dryer before entering the adsorption dryer for deep drying, which can achieve a very low pressure dew point, as low as -70° C. It uses the powerful dehydration capacity of the refrigerated dryer to greatly reduce the water inlet load of the drying tower. After the cold drying treatment, the water entering the adsorption tower is about 20% of that of the ordinary dryer. Under the condition that other conditions remain unchanged, the low dew point dry air used to absorb water vapor can also be reduced by the same amount. That is, the regeneration gas volume is about 1/5 of that of ordinary adsorption dryers, which creates conditions for reducing regeneration energy consumption, especially saving regeneration gas energy consumption, thereby achieving the best economic operation point and high-quality low dew point finished gas.



DM-XZH series	Air capacity	Cooling water flow rate	Air outlet pipe diameter	net weight	dimensions(mm)		
	Nm³/min	m³/h		kg	length	width	height
DM-1XZH	1.5	Air-cooled	ZG1" (Inside screw thread)	295	980	750	1455
DM-2XZH	2.6		ZG1" (Inside screw thread)	350	980	800	1655
DM-3XZH	3.8		ZG1 1/2" (Inside screw thread)	485	1200	1000	1535
DM-6XZH	6.5		DN50	655	1200	1000	1995
DM-10XZH	11		DN65	750	1460	1180	2065
DM-16XZH	17	3	DN80	950	1800	1320	2205
DM-20XZH	23	3.5	DN80	1220	1750	1800	2150
DM-30XZH	33	6	DN100	1460	2050	1650	2450
DM-40XZH	45	7.4	DN125	1980	2420	1830	2706
DM-50XZH	55	8	DN125	2500	2520	1900	2750
DM-60XZH	65	10	DN125	2950	2550	1900	2780
DM-80XZH	85	12	DN150	3550	2650	2400	2800

Working principle of refrigerated compressed air dryer

The compressed air first enters the precooler (20 or 21) for preliminary cooling, and then flows into the regenerator (1) to exchange heat with the returned finished gas, so that the compressed air is further cooled. After the condensed water is discharged outside the machine, the compressed air flows into the evaporator (2) to exchange heat with the refrigerant, so that the compressed air is further cooled to the required dew point temperature. After the compressed air is gradually cooled by the precooler (21 or 20), the regenerator (1) and the evaporator (2), the water vapor in the air condenses into liquid water droplets, and the liquid water is separated by the gas-liquid separator (3). The dry cooling air that has passed through the separator (3) passes through another process of the regenerator (1), and is heated when leaving the dryer, reducing the relative humidity of the air.



Advantages of Refrigerated Compressed Air Dryers

1.Advanced technology

This model fully introduces and absorbs the mature technology of HANKISON in the United States, and on this basis combines the characteristics of actual domestic working conditions, adopts scientific and effective design, making it more efficient and stable operation.
Due to its advanced technology, reliable operation, low and stable dew point, the Dream brand cold dryer meets the requirements of "general compressed air refrigeration dryer" and "general compressed air refrigeration dryer controller".

2.Exchange in countercurrent mode

Due to the use of high-efficiency threaded pipes or light pipes, the heat transfer coefficient is high, and the heat exchange method of countercurrent heat recovery is adopted, which is more energy-saving and stable than the ordinary countercurrent method.

3.The gas-liquid separation is thorough

Thorough gas-liquid separation Due to the use of self-developed gas-liquid separator, the separation efficiency is higher and more thorough than other types of separators, with a separation efficiency of more than 99.

4.The gas-liquid separation is thorough

Thorough gas-liquid separation Due to the use of self-developed technology, the condensed water of the refrigerated dryer is fully separated and discharged out of the machine through a reliable drain valve, which greatly reduces the failure of the dryer during operation and improves the quality of the gas source, so that the Demon brand dryer can operate stably and orderly under different working conditions.

5. Classification of professional working conditions

In order to enable the refrigerated dryer to be used under different working conditions and to operate efficiently, stably and energy-savingly, Dream brand refrigerated dryers are divided into: high temperature air-cooled type, high temperature water-cooled type, normal temperature air-cooled type and normal temperature water-cooled type according to customer needs and actual working conditions.

Application Scenario

(Inlet temperature)：≤80℃
(Pressure drop) :≤0.03Mpa
(Cooling method)： Air cooling
(Dew point)： 2~10℃
(Inlet pressure)： 0.6~1.0Mpa
(Refrigerant):R22

DM-GZA series

High temperature refrigerated dryer (air cooling)

Refrigeration compressor adopts high temperature completely enclosed refrigeration compressor. The heat exchanger and condenser are made of high quality and efficient threaded tubes with high heat transfer coefficient, so the volume is small and the structure is compact. Cylinder material selection stainless steel or carbon steel galvanized, can avoid the secondary pollution of compressed air. Equipment structure design is reasonable, easy to maintain, box shape, beautiful and generous. No foundation installation.

Counter flow cooling design
Adapt to high intake
air temperatures

Complete air-liquid
separation

low dew point

Regular drainage

Customize zero air
consumption Exhaust

Joint venture brand
Refrigeration compressor

DM-GZA series	air handling capacity	power supply	Compressor power	Air outlet pipe diameter	Equipment weight	dimensions(mm)		
	Nm^3 /min	V/Hz	HP		kg	length	width	height
DM-1GZA	1.5	220/50	0.85	ZG1" (Inside screw thread)	60	750	400	700
DM-2GZA	2.6	220/50	1	ZG1" (Inner silver striation)	80	800	450	730
DM-4GZA	4	220/50	1.25	ZG1.5" (Inside screw thread)	105	800	475	800
DM-6GZA	6.5	220/50	1.75	ZG1.5" (Inner silver striation)	136	950	500	880
DM-8GZA	8.5	220/50	2	ZG2" (Inner silver striation)	165	1060	560	983
DM-10GZA	11	380/50	3	ZG2" (Inside screw thread)	195	1180	630	1092
DM-13GZA	13.8	380/50	3.5	ZG2" (Inner silver striation)	255	1180	670	1092
DM-16GZA	17	380/50	4	DN65	300	1240	670	1188
DM-20GZA	23	380/50	5	DN80	385	1420	790	1340
DM-25GZA	27	380/50	6	DN80	400	1650	820	1370
DM-30GZA	35	380/50	8	DN80	550	1650	820	1370
DM-45GZA	45	380/50	10	DN100	630	1850	920	1550
DM-55GZA	55	380/50	12	DN125	680	1980	930	1816
DM-65GZA	65	380/50	15	DN125	720	1980	930	1816

(Inlet temperature)：≤80℃
(Dew point) :2~10℃
(Cooling method)： water-cooling
(Coling water inlet temperature)：≤32℃
(Inlet pressure)： 0.6~1.0Mpa
(Refrigerant):R22
(Pressure drop)：≤0.03Mpa
(Cooling water inlet pressure)： 0.2~0.4Mpa

DM-GZW series

high-temperature freeze dryer (water-cooled)

Using industrial circulating water as the cooling medium for refrigeration systems,suitable for use in high-temperature environments. The heat exchange adopts a counter current design,with high heat transfer efficiency and small volume.

Water cooled design,suitable for harsh working conditions,more stable compared to air cooling

Thorough air-liquid separation

Low dew point

Timed drainage

Customizable zero air consumption exhaust device

Joint venture brand Refrigeration compressor

DM-GZW series	Air handling capacity	source	Compressor power	Cooling water flow rate	Air outlet pipe diameter	net weight	dimensions(mm)		
	Nm^3/min	V/Hz	HP	m^3/h		kg	length	width	height
DM-16GZW	17	380/50	4	3.7	DN65	360	1240	670	1180
DM-20GZW	23	380/50	5	4.5	DN80	420	1420	790	1340
DM-25GZW	27	380/50	6	6	DN80	550	1420	800	1345
DM-30GZW	35	380/50	7.4	7.4	DN80	640	1650	820	1370
DM-45GZW	45	380/50	10	9	DN100	730	1850	920	1500
DM-55GZW	55	380/50	12	11	DN125	830	1980	920	1816
DM-65GZW	65	380/50	15	12.5	DN125	1020	1980	920	1816
DM-85GZW	85	380/50	20	14.5	DN125	1600	2480	1350	2070
DM-100GZW	110	380/50	25	16.5	DN150	2400	2480	1440	2070
DM-150GZW	160	380/50	37	21.5	DN200	2750	2650	1550	2193
DM-200GZW	210	380/50	50	36	DN200	3600	3450	1725	2380

Advantages of adsorption dryers

This product is based on the absorption of the technology of the adsorption dryers from HANKISON in the United States and ZANDER in Germany, and is designed and manufactured reliably and effectively in accordance with the actual working conditions in China, so that users can obtain a more satisfactory and more reliable dryer. The Demeng brand adsorption dryer has the advantages of advanced design, reliable operation and stable dew point. It has obtained multiple national technical patents and complies with the standards of [General compressed Air Adsorption Dryer] and [Controller of General Compressed Air Adsorption Dryer

It has stable exhaust pressure and dew point

1. Unique adsorbent beads with a diameter of 3.0mm are selected, featuring a larger active surface area, higher adsorption capacity and anti-crushing strength, as well as a longer service life.
2. An additional 30% adsorbent is used to compensate for the natural aging of the adsorbent, thereby ensuring a stable pressure dew point.
3. The outstanding adsorption cylinder design refers to the height-to-diameter ratio of HANKISON products in the United States, taking into account transportation while ensuring that the contact time is no less than 5.2 seconds.

Unique layering technology

Based on the adsorption characteristics of alumina and molecular sieves, our company has independently developed a stratification technology. This technology enables the air to first pass through alumina for preliminary drying, reducing the water content in the air, and then undergo deep drying with molecules to achieve air quality with a lower dew point.

Advanced diversion design

As most of the existing diffusers in China have the phenomenon of channel flow, our company has adopted a high-performance diverter selected from the German ZANDER dryer in the design, enabling the compressed air to come into uniform contact with the adsorbent and completely eliminating the channel flow phenomenon.

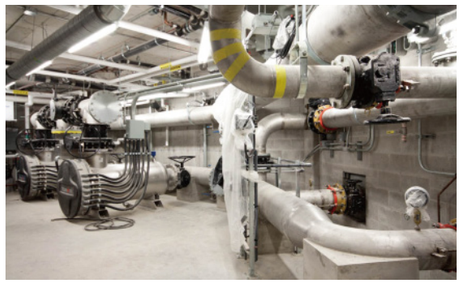
Reliable valve operation and advanced imported electrical equipment

1.The new model adopts imported butterfly valves with excellent performance and reliable operation, all of which have a service life of over one million times, making the model more aesthetically pleasing and more reliable in performance.
2. Except for the heat-free adsorption type dryer, all other adsorption type dryers of our company are equipped with PLC controllers as standard configuration, which makes the performance more stable and reliable and enhances the anti-interference performance. The PLC controller of the adsorption dryer independently developed by our company has been awarded a national technical patent.

Features of Demeng PLC Controller (Optional)

1. The operating status of the equipment can be conveniently configured and networked to establish remote control.
2. It has convenient communication functions (serial communication, RS232 communication, 485 communication);
3. The analog signal processing is stable with a low failure rate.
4. The electrical system has stable performance;
5. Local/Remote selection function;
6. It has a user password management function;
7. It can be conveniently expanded at 1/0 point.
8. After-sales service and maintenance are easy

Application scenarios



仪表标准配置：
1. 左、右塔压力表。
2. 温度传感器
3. 标准配置控制气过滤器和调节器。
4. 采用智能 PLC 控制器。

(Purge air)：≤4%-6%
(Desiccant) ：(Activated aluminum Or molecular sieve)
(Working pressure)： 0.4~1.0Mpa
(Inlet oil content):≤0.01ppm
(Worling periods)： T=60-180 minutes
(Pressure dew point):-20℃~-70℃
(Inlet temperature):0℃~45℃

DM-XSF series

Micro-Heat Regeneration Desiccant Air Dryer

The advanced single-chip microcomputer control technology is adopted to realize the automatic control of operation. The pipeline design is reasonable, the installation is simple, and the operation and maintenance are convenient. Pneumatic film cut-off valve (or pneumatic butterfly valve), switching balance, accurate and reliable action. The regeneration process is divided into two steps: heating regeneration and cooling regeneration, which can maintain a stable low dew point.

Advantages of integrated pressure swing adsorption and temperature swing adsorption

Specific layered design

Low air consumption

Low dew point design

Working principle

This series of adsorption dryers integrate the advantages of pressure swing adsorption and temperature swing adsorption. Adsorption (operation) at normal temperature and high water vapor partial pressure: Desorption (regeneration) at higher temperature and low water vapor partial pressure. The moisture adsorbed by the adsorbent during the adsorption process is completely removed in the regeneration process through the combined effect of two mechanisms: thermal diffusion by high-quality regeneration gas (heating dry air) and high pressure difference.

Product Summary

The micro-heat regeneration adsorption dryer is an energy-saving product designed and developed by our company and has reached the current domestic level. This series of products integrates the advantages of both hot regeneration and non-hot regeneration. It adopts a slightly heated form for the regeneration gas, thereby reducing the consumption of regeneration gas and achieving the purpose of energy conservation. It avoids the shortcoming of short switching time of the non-thermal regeneration dryer and is currently an economical and energy-saving adsorption dryer in the purification industry. It is widely used in metallurgy, power, electronics, food, chemical, petroleum, medicine, tobacco, instrumentation, and automatic control industries.

DM-XSF series	Air capacity	Heater power	Power source	Air outlet pipe diameter	net weight	dimensions(mm)		
	Nm^3/min	kw	V/Hz		kg	length	width	height
DM-1XSF	1.5	1.2	220/50	ZG1" (Inside screw thread) 145	145	750	400	1440
DM-2XSF	2.6	1.5	220/50	ZG1" (Inner silver striation) 195	195	750	400	1640
DM-3XSF	3.8	2.1	220/50	ZG1.5" (Inside screw thread) 285	285	1000	500	1518
DM-6XSF	6.5	3	380/50	ZG1.5" (Inside screw thread) 420	420	1000	450	1950
DM-8XSF	8.5	4	380/50	ZG1.5" (Inside screw thread) 550	550	1100	500	1910
DM-10XSF	11	4.5	380/50	ZG2" (Inner nickel groove) 650	650	1150	500	2050
DM-13XSF	13.8	5	380/50	ZG2" (Inner silver striation) 750	750	1200	550	2100
DM-18XSF	18	5.5	380/50	DN65	760	1515	600	2525
DM-20XSF	23	6	380/50	DN65	930	1680	700	2330
DM-25XSF	28	8	380/50	DN80	990	1600	700	2610
DM-30XSF	35	10	380/50	DN80	1380	1700	750	2635
DM-40XSF	45	12	380/50	DN100	1620	2135	850	2720
DM-50XSF	55	15	380/50	DN100	1950	2185	900	2780
DM-60XSF	65	18	380/50	DN100	2320	2200	950	2805
DM-80XSF	85	24	380/50	DN125	2880	2700	1100	2925

(Purge air)：≤12~15%
(Working pressure) :0.6~1.0Mpa
(Inlet oil content):≤0.1mg/m³
(Pressure dew point):-20℃~-70℃

DM-XWF series

Heatless Regeneration Desiccant Air Dryer

The advanced single-chip microcomputer control technology is adopted to realize the automatic control of operation. The pipeline design is reasonable, the installation is simple, and the operation and maintenance are convenient. Pneumatic film cut-off valve (or pneumatic butterfly valve), switching balance, accurate and reliable action. The regeneration process is divided into two steps: heating regeneration and cooling regeneration, which can maintain a stable low dew point.

Integrating the advantages of pressure swing adsorption and temperature swing adsorption

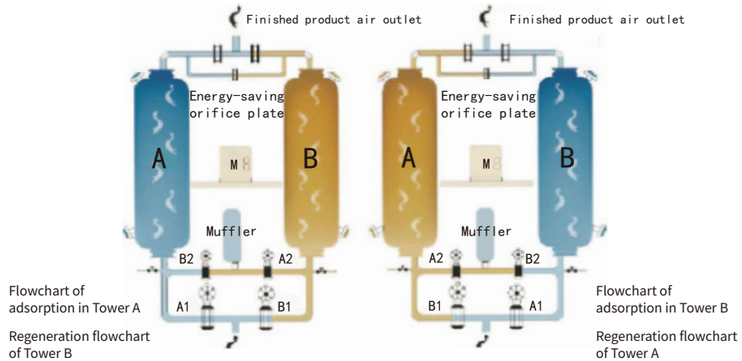
Unique layered design

Low air consumption and no heating

Low dew point design

Working principle

The heat-free regeneration adsorption dryer achieves the drying effect by using "pressure swing adsorption". Since the capacity of air to hold water vapor is inversely proportional to pressure, a portion of the dried air (referred to as the regeneration gas) expands under reduced pressure to atmospheric pressure. This pressure change makes the expanded air drier, and then it flows through a layer of desiccant that has not been connected to the airflow (a drying tower that has already absorbed sufficient water vapor), where the dried regeneration gas absorbs the moisture from the desiccant. Take it out of the dryer to achieve the purpose of dehumidification.



DM-XWF series	Air capacity	power supply	Air outlet pipe diameter	net weight	dimensions(mm)		
	Nm³/min	V/Hz		kg	length	width	height
DM-1XWF	1.5	220/50	ZG1"	125	750	350	1440
DM-2XWF	2.6	220/50	ZG11"	180	750	350	1640
DM-3XWF	3.8	220/50	ZG1.5"	285	1000	500	1518
DM-6XWF	6.5	220/50	ZG1.5"	420	1000	450	1950
DM-8XWF	8.5	220/50	ZG2"	550	1100	500	1910
DM-10XWF	11	220/50	ZG2"	650	1150	1200	1250
DM-13XWF	13.8	220/50	ZG2"	750	1200	550	2100
DM-15XWF	16	220/50	DN65	860	1250	575	2160
DM-20XWF	23	220/50	DN65	890	1500	700	2230
DM-25XWF	28	220/50	DN80	950	1600	700	2500
DM-30XWF	35	220/50	DN80	1320	1700	750	2525
DM-40XWF	45	220/50	DN100	1550	2000	850	2690
DM-50XWF	55	220/50	DN100	1880	2050	900	2720
DM-60XWF	65	220/50	DN100	2250	2285	950	2745
DM-85XWF	85	220/50	DN125	2810	2700	1100	2835
DM-110XWF	110	220/50	DN150	4150	3000	1700	2897
DM-130XWF	140	220/50	DN150	4980	3000	1700	2950
DM-150XWF	160	220/50	DN200	6250	3020	1955	3212
DM- 180XWF	190	220/50	DN200	6460	3220	1955	3270
DM-200XWF	210	220/50	DN200	7280	3700	2000	3358
DM-230XWF	240	220/50	DN200	8520	3700	2000	3770

Power supply :220V/50HZ
Working pressure :0.6-1.0Mpa
Pressure loss :≤0.04Mpa
Air inlet temperature :110 °C -140°C
Cooling water pressure :0.2-0.4Mpa
Cooling water temperature :<32°C
Dew point temperature :-12.2°C to -40°C
Regeneration air volume :<1%

YR Series

Compressed waste heat adsorption dryer

The YR series waste heat dryer uses the waste heat from oil-free air compressors to heat and regenerate the adsorbent, making full use of the waste heat in the compressed air system. Without the use of a heating device, the effect of heating the dryer can still be achieved, fully demonstrating its energy-saving and high-efficiency features. The dew point of the finished gas can reach -40 ° C. It adopts a self-developed PLC controller, which is more stable and reliable in performance than a single-chip microcomputer. The control valves adopt high-quality butterfly valves, ensuring trouble-free switching for more than one million times. The advanced splitter design enables the compressed air to come into uniform contact with the adsorbent, completely eliminating the phenomenon of channel flow.

Advanced diversion design

Energy saving and high efficiency

Stable and reliable

Self-developed

Working principle

The high-temperature air discharged from the air compressor has two properties: high heat and high unsaturation. The waste heat series products effectively utilize this raw compressed air to heat and regenerate the adsorbent, which not only saves the electric heating power consumption required by the micro-heat adsorption dryer series but also reduces the gas consumption at this stage. After the heating regeneration is completed, the original compressed air directly enters the water cooler for cooling and then enters the adsorption tower for adsorption to obtain dry finished gas. We take 1.5% of the finished gas to cold-blow regenerate the already heated adsorbent. After the cold blowing is completed, the two towers are switched, and the cycle repeats.

Unique hierarchical technology

Our company's independently developed stratification technology enables the air to first pass through alumina for preliminary drying, reducing the water content in the air, and then undergo deep drying through molecules to achieve air quality with a low dew point.

YR series	Air capacity	Power consumption	Cooling water circulation	Air outlet pipe diameter	net weight	dimensions(mm)		
	Nm^3/min	W	Nm^3/min		kg	length	width	height
DM-150YR	15	150	6	DN65	1000	2000	1400	2350
DM-180YR	18	150	7	DN65	1200	2000	1500	2450
DM-200YR	22	150	8	DN65	1650	2000	1500	2550
DM-250YR	25	150	10	DN80	1880	2300	1800	2650
DM-300YR	30	150	12	DN80	2000	2300	1800	2680
DM-350YR	35	150	13	DN100	2200	2300	1800	2750
DM-400YR	45	150	14	DN100	2350	2500	1900	2750
DM-500YR	55	200	18	DN100	2500	2500	2000	2780
DM-600YR	65	200	19	DN100	2800	2500	2000	2800
DM-800YR	85	200	23	DN125	3250	3000	2000	2900
DM-1000YR	110	200	31	DN125	4350	3200	2200	3200
DM-1200YR	130	200	35	DN150	5000	3500	2200	3200
DM-1500YR	160	200	45	DN150	6500	3900	2200	3200
DM-2000YR	200	200	58	DN150	7800	3900	2200	3300
DM-2500YR	250	200	75	DN200	9700	4500	2700	3400
DM-3000YR	300	200	55	DN200	12500	4800	2800	3500
DM-3500YR	350	250	100	DN200	13100	4800	2800	3600
DM-4000YR	400	250	120	DN200	13700	5100	3000	3700

Power supply :220V/50HZ
Pressure loss :≤0.04MPa
Inlet temperature of cooling water : ≤32°C
Inlet pressure of cooling water :02-0.4MPa
Working pressure :0.6-1.0MPa
Inlet temperature :110°C to 140°C
Regeneration air consumption :0%
Desiccant: Activated alumina
Pressure dew point :-20°C to -40°C

Blower zero air consumption adsorption dryer

Product Features

The adsorbent is heated and regenerated by using a circulating fan to draw in natural air from the outside, with internal circulation blowing for cooling. It adopts PLC intelligent control. The equipment operates automatically without the need for personnel to stand by and its operating status can be monitored on the local human-machine interface. It adopts a 4-hour long-cycle switching mode. The switching cycle time can be customized by the customer according to the actual dew point requirements. The pressure loss is small and the dew point is stable.

DM-YR series	Gas processing volume	Power consumption	Equipment weight	Inlet/outlet flange dimensions	External dimensions (mm)		
	Nm³/min	(w)	kg		length	width	Height
DM150YR	15	150	1000	DN65	2000	1400	2500
DM180YR	18		1200	DN80	2000	1500	2800
DM200YR	22		1550		2000	1500	3000
DM250YR	25		1880		2300	1800	2800
DM300YR	35		2000		2300	1800	3000
DM400YR	45	200	2350	DN100	2840	2050	3000
DM500YR	55		2500	DN125	2500	2000	3000
DM600YR	65		2800		2500	2000	3100
DM800YR	85		3250		3200	3200	3200
DM1000YR	110		4350	DN150	3500	2200	3200
DM1200YR	130		5000		3900	2200	3500
DM1500YR	150		6500	DN200	3900	2200	3400
DM2000YR	200		7800		4500	3700	3800
DM2500YR	250		9700	DN250	4800	2800	3800
DM3000YR	300		12500		4800	2800	3800
DM3500YR	350		13100	DN300	4800	2800	3900
DM4000YR	400	200	13700		5100	3000	3900

Design conditions: Working pressure 0.7MPa, inlet temperature :38°C

GFR series Forced air adsorption dryer

Purge Air :<1-3%
Working pressure (Inlet pressured):0.6-1.0Mpa
Inlet oil content :≤0.1mg/m
Pressure Dew point :-20°C to -40°C
Standard Working periods :8 hours
Inlet temperature :0°C to 45°0
Power supply :380V/50HZ

Adopt PLC control

The controller adopts the PLC controller independently developed by our company, which makes the equipment operate more stably, with higher reliability and stronger anti-interference ability.

Principle

Adsorption drying process: Compressed air with water content flows through an adsorption tower equipped with high-performance adsorbents. The moisture in the compressed air is absorbed and dried by the adsorbents and flows towards the gas consumption terminal for use at the gas consumption point.

Advantages

1.Low regeneration air volume: The air drawn in from the outside air by a high-pressure blower is used as the regeneration gas, consuming only 1% of the compressed air for drying products for blowing cooling. The air consumption is 1/15 of that of the non-heat regeneration adsorption dryer and 1/6 of that of the micro-heat regeneration dryer.
2.Adopt high-pressure blowers with high reliability, long service life and low noise.
3.High-performance PLC is adopted as the control host, which has strong anti-interference ability, ensuring the smooth operation of the equipment. The operation status of the equipment can be monitored locally or remotely (communication interfaces can be provided for customers). 4. Based on the adsorption characteristics of alumina and molecular sieves, our company has independently developed a stratification technology. This technology enables the air to first pass through alumina for preliminary drying, reducing the water content in the air, and then undergo deep drying through molecular sieves to achieve air quality with a low dew point.

GFR series	flow	Power	Rated output power of the heater	Inlet/outlet flange dimensions	Equipment weight	External dimensions (mm)		
	Nm³/min	(Kw)	(Kw)		kg	length	width	Height
DM150GFR	17	1.6	8	DN65	1400	1500	1200	1980
DM200GFR	23	2.2	8	DN80	1650	1800	1400	2010
DM250GFR	27	2.2	10		1750	1900	1600	2105
DM300GFR	33	4.3	12		2000	1865	1860	2120
DM400GFR	45	4.3	16	DN100	2500	1980	1930	2165
DM500GFR	55	5.5	20	DN125	2850	2080	1985	2200
DM650GFR	65	7.5	25		3680	2150	2105	2320
DM800GFR	80	8.5	32		4000	2245	2200	2380
DM1000GFR	100	12.5	40	DN150	4750	2340	2320	3420
DM1200GFR	120	12.5	48		5800	2385	2410	3525
DM1500GFR	150	15	60	DN200	6500	2460	2520	3610
DM1800GFR	180	22	72		7900	2800	2500	3610
DM2000GFR	200	22	80		9200	2800	2520	3610
DM2500GFR	250	30	120		11500	3200	2520	3610

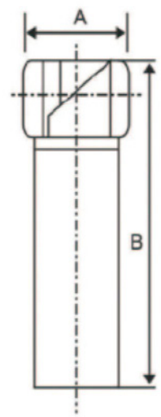
Compressed air precision filter

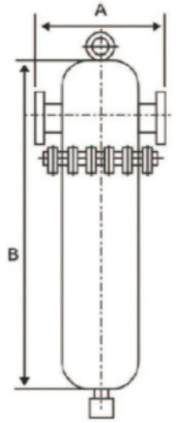
Filter using high-quality cast aluminum shell, as well as hydrophobic and oleophobic better imported material filter element, filter bureau has corrosion resistance, good permeability, high filtration efficiency, good air tightness characteristics, suitable for all kinds of compressed gas conditions.

1. DQ grade air-water/separation filter 3 μ m 5ppm
2. DP grade main pipeline/dust filter l μ m lppm
3. DS grade high-efficiency oil removal filter
 0.01 μ m 0.0lppm
4. DA grade ultra efficient oil removal/micro oil filter
 0.01 μ m 0.001ppm
5. DH grade activated carbon/oil removal steam filter
0.01um 0.003ppm

Characteristics of Compressed Air Precision Filters

Universality - According to IS09001, suitable for various air compressors, compressed air is used in conjunction with dryers. The high-quality die-casting aluminum shell has a novel appearance, exquisite design, and internal space. The exterior is treated with high-quality epoxy resin precision spray anti-corrosion treatment, with a long service life. The flange interface filter adopts high-quality steel shell, manufactured according to national standards, and the exterior is treated with high-quality spray anti-corrosion treatment.





Fiber folding filter element

Large filtration area

O-ring seal

The Mchanism of Filtration

Diffusion Deposition: Due to Brownian motion, the trajectory of each fine particle is not consistent with the flow direction of compressed air. As the particle size decreases, the intensity of Brownian motion increases, and the probability of collision between fine particles and fibers also increases, resulting in stronger diffusion deposition.

Direct Interception: This mechanism is related to the size of the particles. When the gap between fibers is smaller than the diameter of the particles, the particles are intercepted.

Inertial Deposition: When compressed air passes through fibers, the streamline will bend, and due to the effect of inertia, particles in the compressed air will not follow the bent streamline and will be thrown onto the fibers to deposit there Obviously, this inertial effect will strengthen with the increase of particle size and compressed air flow rate.

Gravity Deposition: Various particles have a certain settling velocity due to the effect of gravity, so the trajectory of the particles deviates from the streamline of compressed air, which can cause the particles to collide with fibers.

Electrostatic Deposition: Both particles and fibers may carry charges, so due to the interaction or induction force between charges, particles can deposit on fibers.

Van Der Waals Deposition: When the distance between particles and fibers is small, van der Waals intermolecular forces can cause particle deposition Due to the simultaneous action of the above-mentioned filtration mechanisms, the filtration efficiency of fiber filters can reach over 99%.

Advantages of Compressed Air Precision Filters

Separate Filter (DQ)

Suitable for filtering out a large number of wave bodies and 3-micron sized condensates (5ppm w/w maximum residual oil content) Double stage filtration First stage, two stainless steel pore tubes for 10 micron mechanical separation>Second stage - deep fiber media filtration of 3-micron homomorphic and liquid particles.

Main Pipeline Filter (DP)

Suitable for filtering large amounts of liquids and 1-micron sized condensates (maximum residual oil content of 1.0ppm w/w) Both inner and outer filter cartridges are corrosion-resistant Dual stage filtration The first stage fiber media and media filter screen are alternately stacked to filter out larger particles The second stage multi-layer epoxy resin bonded mixed fiber media aggregates oil mist and filters out solid particles.

Efficient Degreasing Filter (DS)

Suitable for aggregating fine water vapor and oil mist; It can filter out agglomerates as small as 0.01 μ m (0.01ppm w/w maximum residual oil content) Both inner and outer filter elements are corrosion resistant Dual stage filtration First stage multi-layer fiber media and media filter screen, filter out large particle tracks, and pre filter before the air enters the level 2 filtration Second stage- multi-layer adhesive mixed fiber media, filter out small agglomerates Outer coated closed foam sleeve.

Ultra Efficient Oil Removal Filter (DA)

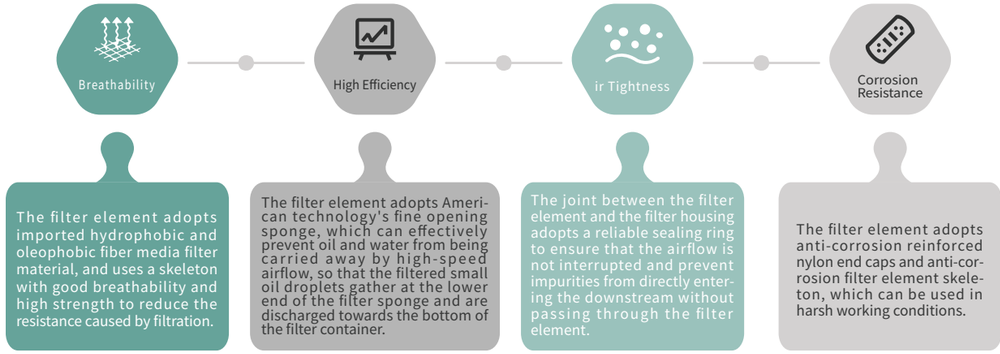
It is suitable for coalescing fine water vapor and oil mist: it can filter out agglomerates as small as 0.01 μ m (0.001ppm w/w maximum residual oil content) both inner and outer filter elements are corrosion resistant two-stage filtration the first stage coated closed foam sleeve for pre filtration and airflow dispersion the second stage multi-layer matrix mixed fiber medium to filter out extremely fine agglomerates the outer coated closed foam sleeve.

Oil Removal Steam Filter (DH)

It is suitable for filtering oil vapor and carbon oxide vapor that can be normally absorbed by activated carbon: it can filter solid particles as small as 0.01 μ m (0.003 ppm w/w maximum residual oil content) Both inner and outer filter elements are corrosion resistant Dual stage filtration The first stage extremely fine activated carbon powder stable layer can filter most of the oil vapor The second stage multi-layer fiber media, adhesive micro fine filter activated carbon powder, can filter residual oil vapor Multilayer fine media, prevent pollutant migration Outer coated closed foam sleeve, prevent fiber migration Under the designed operating conditions, the design life can reach 1000 hours.

Optional Accessories

Characteristics of Filter Element



Filter type	air handling capacity	Air nozzle diameter	weight	dimensions(mm)	
	Nm^3/min		kg	length	width
DQ/P/S/A/H-001	1.72	G1"(Inner silver striation)	1.3	290	104
DQ/P/S/A/H-002	2.6	G1"(Right rib)	1.32	290	104
DQ/P/S/A/H-003	3.8	G1 1/2"(Inner silver striation)	2.43	370	125
DQ/P/S/A/H-006	7.2	G1 1/2"(Inner silver striation)	2.9	495	125
DQ/P/S/A/H-010	11	G2"(Inner silver striation)	4.14	593	138
DQ/P/S/A/H-013	15	DN65	8	748	161
DQ/P/S/A/H-020	20	DN65	8.23	1008	161
DQ/P/S/A/H-025	25	DN80	31.5	1120	376
DQ/P/S/A/H-030	30	DN80	34	1160	376
DQ/P/S/A/H-040	45	DN100	67	1250	400
DQ/P/S/A/H-050	55	DN125	78	1250	450
DQ/P/S/A/H-060	66	DN125	90	1280	450
DQ/P/S/A/H-080	88	DN125	145	1350	450
DQ/P/S/A/H-100	110	DN150	150	1350	540
DQ/P/S/A/H-130	132	DN150	180	1350	612
DO/P/S/A/H-150	154	DN200	215	1350	612
DQ/P/S/A/H-180	180	DN200	240	1450	662
DQ/P/S/A/H-200	200	DN200	360	1750	662
DQ/P/S/A/H-230	230	DN200	400	1750	730
DQ/P/S/A/H-250	250	DN200	420	1740	730
DQ/P/S/A/H-280	280	DN250	465	2060	802
DQ/P/S/A/H-300	300	DN300	500	2150	855

Stainless Steel Compressed Air Filter

DQ grade air water/separation filter 3um 5ppm
DP grade main pipeline/dust removal filter 1um 1ppm
DS grade high-efficiency oil removal filter 0.01um 5ppm
DA grade ultra high efficiency oil removal/micro oil filter 0.01um 0.01ppm
DH grade activated carbon/oil removal steam filter 0.01um 0.03ppm sterilization filter 0.22um steam filter 1um

Shell:

Designed according to industry standards, the refined high-quality 304 or 316 stainless steel sanitary shell, with high-precision mechanical polishing inside and outside, and a standard design pressure of 10 bar.

Filter Element:

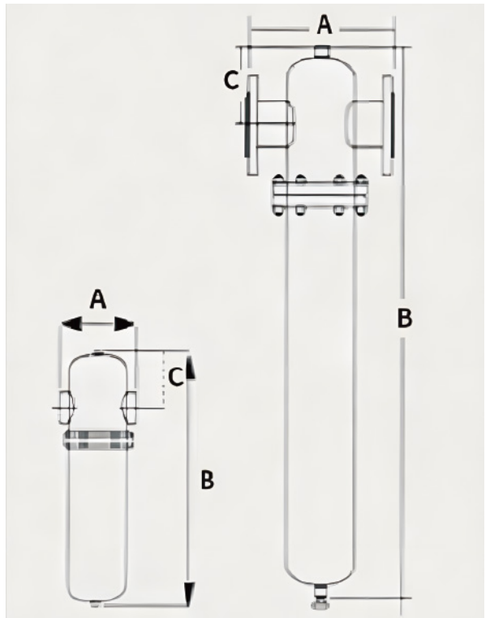
Adopting high-performance fiber folding filter cartridges with a large filtration area, and also using internationally recognized double 0-type sealing rings, the sealing effect is more reliable.

Sterilization Filter:

Adopting steam resistant PTFE folding/PTFE hydrophobic filter element, it can filter bacteria, viruses, bacteriophages, with a filtration accuracy of 0.01um.

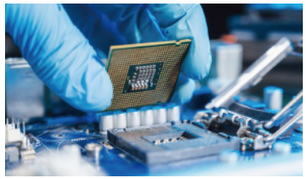
Sterilization Method:

Disinfect and sterilize with clean steam at ⩽ 130 ° C once a week for 30 minutes each time, which can completely remove bacteria and various bacterial cells. The sterilization cycle can be determined based on actual usage. If fermentation production is stable, regular sterilization can be adopted, and the sterilization cycle can be set at one week, one month, or two months. Steam pressure ⩽ 0.02Mpa, valves must be slowly opened and closed; The sterilization steam must be saturated steam, and the sterilization process also needs to be supervised by a dedicated person.



Scenario Application

In industries such as food, biochemistry, beverages, beer, pharmaceuticals, electronics, etc., the pipelines for compressed air and fermentation air injections are generally made of stainless steel material, which has high requirements for air cleanliness. Stainless steel air precision filters and sterilization filters can meet the special process requirements of these industries.



Filter Model	Air Flow Rate	Air Connection Diameter	Overall Dimension(mm)		Number of filter cartridges
	Nm^3/min		A(Width)	B (Height)	
BFS1	1	DN15	180	340	1
BFS-2	2	DN20	180	340	1
BFS-3	3	DN25	180	340	1
BFS-6	6	DN40	200	470	1
BFS-8	8	DN40	200	470	1
BFS-10	11	DN50	240	600	1
BFS-15	15	DN50	240	720	1
BFS-18	18	DN65	240	850	1
BFS-23	23	DN80	280	980	1
BFS-27	27	DN80	400	760	2
BFS-35	35	DN100	400	760	2
BFS-40	40	DN100	400	760	2

FYS Series Waste Oil Collector

Wherever compressed air is used, there is a discharge of oil-water mixed condensate. The amount of condensate generated in a compressed air system is related to the processing capacity, operating conditions, and installation conditions of the air compressor, and the emission range can range from 10 liters to 10000 liters per month. For example, an air compressor with a processing speed of 5Nm³/min and an exhaust pressure of 7Kg/cm², Working for 8 hours a day, with an ambient temperature of 21 ℃, 1.03 bar, and a relative humidity of 70%, it can produce 30.4 liters of condensate per day.

Working Principle and Usage Instructions

The FYS series waste oil collector is equipped with a condensate inlet, which can collect condensate discharged from air compressors, air tanks, dryers, and filters. The condensate enters the gel expansion separation chamber, where compressed air is released and rapidly expanded to atmospheric pressure. Oil and water drip downwards due to gravity and separate from the air. The separated air is filtered by activated carbon to remove oil mist and odors and discharged upwards. The condensate is further separated in the sedimentation chamber. Due to the different specific gravities of oil and water, the oil floats on top and the water sinks on the bottom. The oil is collected through the oil discharge pipe and flows into the oil tank. The water passes through an activated carbon filter and can be directly discharged into the sewer after filtration. Activated carbon filter is a fine plastic mesh with activated carbon, which can filter out larger oil droplets and filter out remaining micro oil droplets. The oil content of the water-cooled condensate treated by activated carbon filter will be less than 10ppm, fully meeting the national environmental protection requirements.

Generation of Waste Oil Collector

According to the Environmental Protection Law, oil condensation waves must be separated from the mixed condensate and treated appropriately before the water-cooled condensate can enter the sewer system, meeting the national requirements for environmental protection.

Describe

The oil collector, as long as it is selected appropriately and installed correctly, can reliably remove floating oil condensate from the condensate and collect it from the oil collection tank. The residual oil content of the separated water-cooled condensate is less than 10ppm, which meets the emission standards.

Process Principle

1.The condensate can flow into the standard 1/2 "interface under pressure or gravity, and is used for compressors, dryers, filters, and other condensate pipelines.
2. An air expansion chamber equipped with an activated carbon filter is used to discharge air, reduce pressure, and decrease the inlet air and condensate flow rates to make the chamber a settling chamber with a calm liquid surface. The activated carbon filter core is used to remove oil from the discharged air.
3. Sedimentation and settling chamber - The oil float is mechanically separated in the top layer of the condensate settling chamber.
4. Oil discharge port
5. Filtration - Activated carbon filter: This filter filters out all remaining micro oil droplets and ensures the performance of the separator.
6. Drainage... - If the residual oil content of the purified water-cooled condensate is less than 10ppm, it can be directly discharged into the sewer.

FYS Series	Volume	Height (MM)	Barrel Diameter (MM)	Unit Weight kg	Air Outlet Diameter (MM)
FYS-1	0.1	1774	450	136	/
FYS-3	0.3	2130	600	177	/
FYS-5	0.5	2400	700	206	/
FYS-6	0.6	2530	800	226	/
FYS-10	1	2730	900	352	/
FYS-20	2	3030	1200	528	/
FYS-30	3	3602	1300	742	/
FYS-40	4	3640	1500	770	/

YF series compressed air oil-water separator

The compressed air oil-water separator is a new type of compressed air oil-water separator developed by our company through absorbing and digesting the advanced technology of foreign compressed air oil-water separators and integrating the essence of advanced structure. The product is internally demisted with wire mesh, and the shell is of steel welded tank structure, with a general use pressure of 1.0Mpa. YF series compressed air oil-water separators can effectively remove the dust, water and oil mist in the compressed air by using the mechanisms of direct interception, inertial collision, Brownian diffusion and condensation. This product has a large water output and oil removal capacity, and is suitable for a wide range of working conditions.

Inlet pressure: 0.4~1.0Mpa
Inlet temperature: 5~65 ° C
Initial pressure drop: ⩽ 0.005Mpa
Filter aperture: 5um
Water removal rate: ⩾99%
Outlet air oil content: ⩽ 10ppm

YF Series	Air Flow Rate	Air Outlet Diameter (MM)	Unit Weight	Overall Dimension(mm)		
	Nm^3/min		kg	Length	Width	Height
DM-1FS	1.2	ZG1"	24	245	133	530
DM-2FS	2.4	ZG1"	27	245	133	530
DM-3FS	3.8	ZG1"	27	245	133	530
DM-6FS	6.5	ZG1.5"	48	245	159	571
DM-10FS	10.7	ZG2"	71	335	159	1035
DM-15FS	15	DN80	75	365	159	1139
DM-20FS	20	DN80	90	390	273	1139
DM-30FS	35	DN80	106	440	273	1180
DM-40FS	45	DN100	136	500	325	1230
DM-50FS	50	DN125	150	565	377	1250

GR series Compressed air oil-water separator

The GR series compressed air high-efficiency oil remover product is mainly made of ultrafine fibers and adopts a three-stage purification process of centrifugal separation, pre filtration, and fine filtration. It can more thoroughly remove oil, water, and dust from compressed air and obtain ultra clean dry compressed air with a filtration accuracy of up to 0.01um and a residual oil content of less than 0.1mg/m.

Inlet pressure: 0.4~1.0Mpa
Inlet temperature: 5~65 ° C
Initial pressure drop: ⩽ 0.007Mpa
Filter aperture: 5um
Water removal rate: ⩾99%
Oil content of export gas: ⩽ 0.01ppm

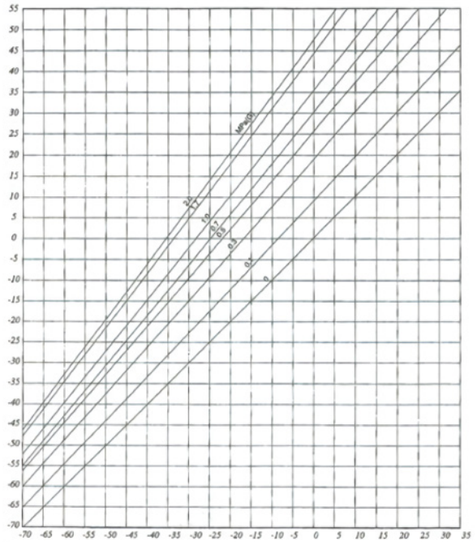
GR Series	Air Flow Rate	Air Outlet Diameter (MM)	Overall Dimension(mm)		
	Nm^3/min		Length	Width	Height
DM-1CU	1.5	ZG1"	195	89	545
DM-2CU	2.4	ZG1"	270	133	660
DM-3CU	3.8	ZG1"	270	133	660
DM-6CU	6.5	ZG1/2"	300	159	1210
DM-10CU	11	ZG2"	360	159	1555
DM-15CU	15	DN80	425	159	1555
DM-20CU	20	DN80	425	159	1555
DM-30CU	30	DN80	425	273	1795
DM-40CU	45	DN100	565	426	1750
DM-50CU	55	DN125	730	529	1750

DHL Series Rear Cooler

The rear cooler of this series is a supporting equipment for air compressors, which can cool the compressed air generated by the compressor; Make most of the water in the air evaporate and condense before being discharged outside the machine, in order to meet the operating conditions of downstream drying equipment. The water-cooled rear cooler works with water as the cooling medium and is basically not affected by environmental temperature. It has the characteristics of small volume, high cooling efficiency, and easy use, and is suitable for high temperature, high humidity, and heavy dust environments.

Inlet pressure: 0.4~1.0Mpa
Inlet temperature: ⩽ 140 ° C
Outlet temperature: ⩽ 45 ° C
Cooling water inlet temperature: ⩽ 32 ° C
Cooling water inlet pressure:0.2~0.4mpa

DHL Series	Air Flow Rate	Air Flow Rate	Air Outlet Diameter (MM)	Diameter of Cooling Water Connection Pipe (MM)	Unit Weight	Overall Dimension(mm)	
	Nm^3/min	Nm^3/min			kg	Diameter	Height
DMAL-1w	1	0.5	ZG 3/4"	ZG 1/2"	110	208	1303
DMAL-3w	3	1	ZG1"	ZG 1/2"	140	259	1325
DMAL-6w	6	1.5	ZG2"	ZG1"	248	259	1625
DMAL-10w	10	3	ZG2"	DN65	380	419	1655
DMAL-13w	15	4.5	ZG2"	DN65	380	445	1953
DMAL-20w	20	6	ZG2"	DN80	450	473	1981
DMAL-30w	30	9	ZG2"	DN100	780	525	2007
DMAL-40w	40	12	ZG2"	DN125	880	677	2106
DMAL-60w	60	18	ZG2"	DN125	1280	677	2292
DMAL-80w	80	24	ZG2"	DN125	1580	677	2472
DMAL-100w	100	30	ZG3"	DN150	1900	778	2931



Pressure Dew Point°C

Calculation Method for Converting Saturated Humidity and Atmospheric Dew Point

For example, when the inlet temperature of an air compressor is 30 ° C (humidity 100%), it is compressed to 0.69Mpa and then cooled by an air dryer to 10 ° C (under pressure). How much moisture is removed?

When checking the relationship between atmospheric dew point and moisture content in Table

30℃ the moisture content is 30.3g/m^3.

Check the conversion chart between pressure dew point and atmospheric pressure dew point.

At 0.69Mpa, the pressure dew point of 10 ° C is converted to atmospheric dew point of -17 ° C ℃. -The moisture content at 17 ° C is 1.37g/m3. Therefore, 30.3-1.37=28.93g/m^3, which means that 28.93g of moisture has been removed from 1m3 of air.

Dew Point (°C)	Moisture content (g/m^3)	Dew Point (°C)	Moisture content (g/m^3)	Dew Point (°C)	Moisture content (g/m^3)	Dew Point (°C)	Moisture content (g/m^3)	Dew Point (°C)	Moisture content (g/m^3)
33	35.7	14	12.07	-5	3.407	-24	0.7678	-43	0.1298
32	33.8	13	11.35	-6	3.169	-25	0.7074	-44	0.1172
31	32.1	12	10.66	-7	2.946	-26	0.6463	-45	0.1055
30	30.3	11	10.01	-8	2.737	-27	0.5922	-46	0.09501
29	28.8	10	9.309	-9	2.541	-28	0.5922	-47	0.08544
28	27.2	9	8.819	-10	2.358	-29	0.496	-48	0.07675
27	25.8	8	8.27	-11	2.186	-30	0.4534	-49	0.06886
26	25.4	7	7.75	-12	2.206	-31	0.4141	-50	0.06171
25	23.1	6	7.26	-13	1.876	-32	0.3779	-51.1	0.054
24	21.8	5	6.797	-14	1.736	-33	0.3445	-53.9	0.04
23	20.6	4	6.36	-15	1.605	-34	0.3138	-56.7	0.029
22	19.4	3	5.947	-16	1.483	-35	0.2856	-59.4	0.021
21	18.3	2	5.559	-17	1.369	-36	0.2597	-62.2	0.014
20	17.3	1	5.192	-18	1.261	-37	0.2539	-65	0.011
19	16.3	0	4.847	-19	1.165	-38	0.2141	-57.8	0.008
18	15.4	-1	4.523	-20	1.074	-39	0.194	-70.6	0.005
17	14.5	-2	4.217	-21	0.9884	-40	0.1757	-73.3	0.003
16	13.6	-3	3.93	-22	0.9093	-41	0.159	/	/
15	12.8	-4	3.66	-23	0.8359	-42	0.1438	/	/

Energy Conservation

Air compressors are the "electric tigers" in industrial electricity consumption,with an average power consumption of 20%. We have made a series of efforts and research on how to use the same electricity to create more air to help users save energy,and have made important breakthroughs. The permanent magnet variable frequency screw machine developed by the company can save users about 25-35% of electricity while ensuring the original work efficiency.

25%

Superior to energy-saving standards

intelligent control

Rust proof shell

Efficient and energy-saving

Constant current and stable voltage

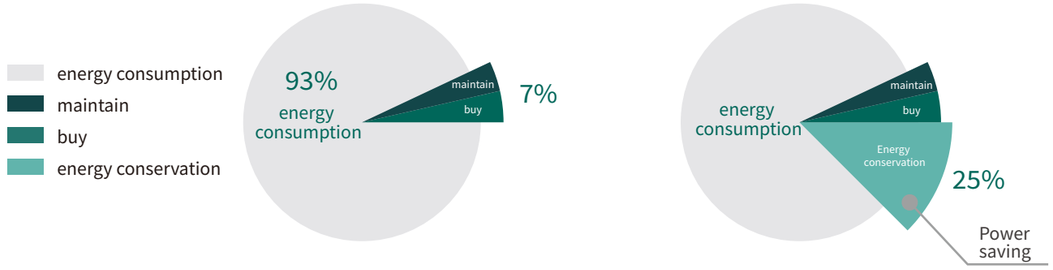
Easy to use and worry free

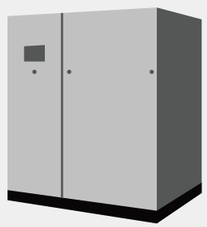
reduce the noise

Energy saving and cost reduction

When purchasing an air compressor,the traditional cost (i.e. purchase cost+maintenance cost) only accounts for 7% of the total cost,while energy consumption accounts for 93%. The two-stage compression direct connection/permanent magnet screw air compressor saves 25-30% energy compared to ordinary (power frequency) air compressors.

—— aking 75KW as an example





Ordinary (power frequency) air compressor

Dream air compressor

Desmond 75KW air compressor
It saves about 25% of electricity a year

Intelligent control technology

cloud intelligent control three functions and value

Computer remote monitoring

Dream air compressor
wifi connection control
remote monitoring

Mobile phone
remote monitoring

Digital station intelligent control

reduce operation and maintenance costs by 10-30%
-- 3D virtual air compressor station
-- data Min monitoring
-- workshop diagnosis report
-- fault online prezi
-- maintenance cycle reminder

Intelligent control Intelligent tuning

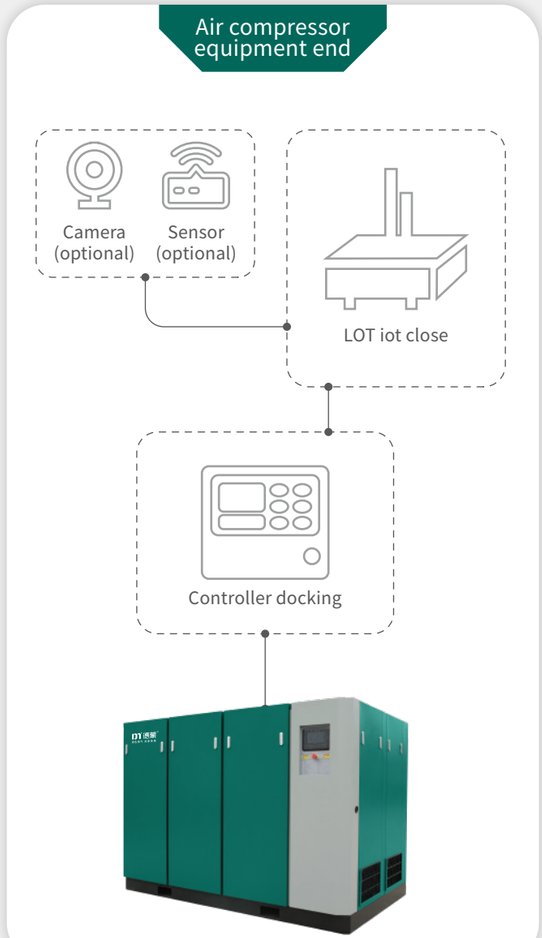
reduce manual labor time by 50%

-- automatic control of air compressor
-- AI algorithm autonomous tuning
-- dynamic decision-making of equipment priority
-- intelligent control of auxiliary equipment

Whole station energy saving Whole station energy saving

save the power consumption of 5-30%

-- edge computing technology
-- narrow band constant voltage technology
-- multi-parameter and multi
-- constraint control algorithm
-- big data visualization technology



Digital station house

Station monitoring + control (computer) air compressor, cold dryer, suction dryer, water, fan, waste heat recovery machine, flow meter, electricity meter, etc Intelligent monitoring technology Based on the "Internet of Things"

Intelligent monitoring technology

Based on the "Internet of Things" intelligent control technology, the product has the ability to transport parameters through cloud technology, and our users can achieve it through computers or mobile phone apps.