



Produce Air Power

Permanent magnet · Variable frequency · Intelligent · Energy saving



SCREW AIR COMPRESSOR

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Dehaha Compressor Jiangsu Co.,Ltd



Constantly strive for excellence

DEHAHA Compressor Jiangsu Co.,Ltd.,we specialize in researching & developing,manufacturing industrial air compressors,adhering to the world's industrial design concepts and rigorous manufacturing processes.

The energy-saving technology and modern production makes our products high quality and widely used in various fields.

From simple compressors to custom-designed compressed air systems,DEHAHA always insist on providing our customers with superior products and the energy-efficient solutions.

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About Dehaha

Dehaha Compressor was founded in 1996 with over 150 skilled employees and more than 25 R&D engineer teams. We focus on the research & develop, manufacture and energy-saving solutions of screw air compressor to create value for customers and society. In 2018 our total sales volume approached 15 million US dollars. By over 23 years enhanced experiences of designing, producing and marketing, today our valued customers are over 130 countries. Germany Standard and 13 years exporting experience help us won more than 50 loyal overseas agents.

Dehaha's primary businesses focus in following key areas:

- Oil-injected rotary screw compressors
- Portable screw air compressors
- Oil free air compressors
- High pressure air compressors
- Air treatment equipment

At Dehaha, we earn our customers' trust and satisfaction by manufacturing the superior quality compressed air products for all industries. All of our products are designed for reliable performance, easy maintenance, and maximum energy efficiency. We have sales representatives who can speak English, Spanish, French, and Russian which makes it easier for our clients from all over the world to interact and negotiate with us.

Dehaha continuously innovates product development and management to meet customers' demand. The powerful enterprise culture and continuous innovation make Dehaha improved rapidly to reach the business principle "Energy Saving First, Mutual Value Shared".

Dehaha mission is to be a world-renowned high-end brand, with sustainable development, constantly improving its own value and sharing it with our customers and staff. Committed to offer our customers a silent and energy-saving manufactured products.

The Development Of Dehaha

"Shanghai Weikai" was Founded, main business of selling air compressor.

01

1996

2000

02

We started to research and develop screw air compressors independently, and changed our name to Shanghai "Weicheng".

Our name is changed to Shanghai Dehaha Screw Compressor Co., Ltd. We produce belt and direct driven screw air compressor with air cooling and water cooling type. Our business covers 57 countries and regions around the world.

03

2004

2011

04

New production base was founded in Nantong city, Jiangsu Province and changed its name to Nantong Dehaha Screw Compressor Co., Ltd. We independently research and develop permanent magnet variable frequency air compressor, mainly service for textile industry.

Our production base was moved to Qidong city, Jiangsu province. And changed its name to Dehaha Screw Compressor Jiangsu Co., Ltd. We introduced a new two-stage compression permanent magnet variable frequency screw air compressor to the market.

05

2016

Future

06

We insist on the product concept constantly strive for excellence. No matter the big overall structure design of air compressor, or a small screw standard application, we always keep a rigorous attitude to work and continue to explore new energy-saving solutions.

Comprehensive Service System

DEHAHA means commitment and quality assurance

Dehaha, we have our own production bases and factories in China. We have 50 agents abroad and our valued customers cover 57 countries around the world. Not only to ensure product quality and delivery time, but also to ensure after-sales service.



As the global leading compressor system equipment manufacturers, Dehaha not only pay more attention to product performance and quality, but provide more efficient services for the users.

Dehaha not only has perfect service network in America, Europe, Australia, Africa, southeast Asia and Middle East, also have sales center and service network in more than 30 domestic large and medium-sized cities in China. At the same time, we have actual users in 100 countries and regions, furthermore we have experienced management team and service team and enough stocks, let users no worries.

After-sales Service Commitments

Quality guarantee

All the key parts are imported from overseas (See the manufacturers and brands of key parts for particulars).

Warranty

One year for the whole machine and five years for the air end (except the damageable and consumable parts) Long working life, Service worldwide, High quality.

Installation and commissioning

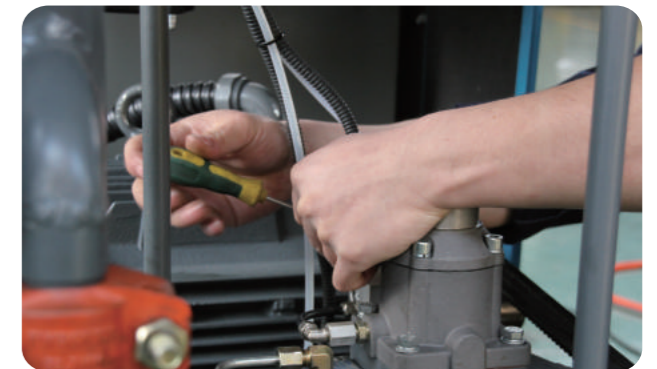
Provide customers with installation commissioning instructions, and all service-providing personnel are strictly trained technically by our company.

After-sales services

Our company has offices and service network in every major cities in China, giving prompt replies to customers after notified and arriving at different sites within 24-48 hours for troubleshooting.

Spare parts

Our company always supply spare parts on most favorable terms.



Dehaha Product Advantage

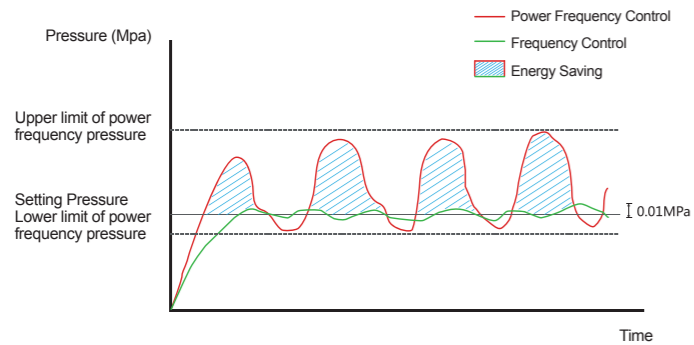


Intelligent Cloud Control

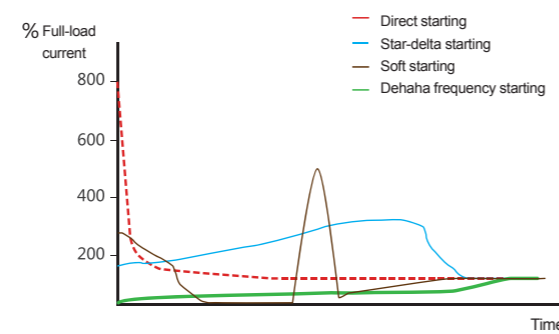


Advanced Frequency Control System

1. In the large rotor with low specific power, the speed of the rotor is constantly adjusted, and the necessary air quantity is obtained with the change of gas point. The pressure fluctuation is controlled within $\pm 0.01\text{Mpa}$, and there is almost no loss of energy loss caused by pressure rise.
2. The energy loss caused by no unloading state directly saves 45% of the power consumption.
3. High performance frequency converter, small starting impact, avoid starting overload.
4. Specially designed frequency cabinet, large size, best ventilation design, the ambient temperature is 45°C , and is still performance.



Contrast diagram of frequency control and power frequency control



Contrast diagram of starting current

Energy Saving Cost Analysis

Energy saving e.g of permanent magnet synchronous frequency converter on screw air compressor:
 average output capacity of one set 37kw conventional screw air compressor only attain to 75% of its rated exhaust.
 Note: the model that client bought, its air flow: $6\text{m}^3/\text{min}$, but the actually average usage is only taken 75%, that is $4.5\text{m}^3/\text{min}$ approximately.

For example:

a compressor runs 6000 hours in a year, the electric charge: 1.1RMB per kw/h, calculation as following:

Conventional compressor will produce 3 wastages:

1. No-load loss
2. Differential pressure loss
3. Motor efficiency loss

As we all know, intrinsic service factor of 37kw conventional screw air compressor is 1.2, 37kw actually means the output shaft power (real load power), the motor input power should be 45kw approximately.

Calculation:

No-load loss = 25% of unload time x No-load current loss due to No-load (45%).

No-load loss energy saving formula = $0.25 \times (0.14 \times 45 \times 6000) \times 1.1 = 31185 \text{ RMB/year}$.

Differential pressure loss = 75% of loading time X energy consumption is brought by 2bar pressure difference (14%).

Motor efficiency loss = efficiency of 37kw permanent magnet is larger around 5% than common induction motor.

Motor efficiency loss formula = $45 \times 6000 \times 0.05 \times 1.1 = 14850 \text{ RMB/year}$.

Saving cost = $33412.5 + 31185 + 14850 = 79447.5 \text{ RMB/year}$.

Energy cost of common compressor = 75% of loading time X $45 \times 1.1 \times 6000 = 222750 \text{ RMB/year}$ + 25% of unload time X $0.45 \times 45 \times 1.1 \times 6000 = 33412.5 \text{ RMB/year} = 256162.5 \text{ RMB/year}$.

Power saving rate = $79447.5 / 256162.5 = 31\%$.

Conclusion:
 The electricity bill can be reduced 31% effectively if use permanent magnet motor.

Introduction To Compressor Air End

- ① No vibration and low noise-perfectly expressing original Germany.
- ② Other manufactures transform from piston to screw,while Dehaha is always professional in R&D of all kinds of screw air comporessor.
- ③ Big rotor low speed and direct driven.



ROTOR

Rotors are asymmetric in profile and backed up by ball bearings and roller bearings and operate at a low speed, there by low in abrasion and maintenance and repair expenses and the compressor air end being long in service life.Helical gears can produce axial force to kill some acting force,which reduces the load of the bearing of compressor air end.



BEARING

SKF bearings,which are of high quality and can withstand unusual weight,are adopted for the screw air compressors to guarantee the rotation and load of bearings and thereby ensure long service life of bearings.

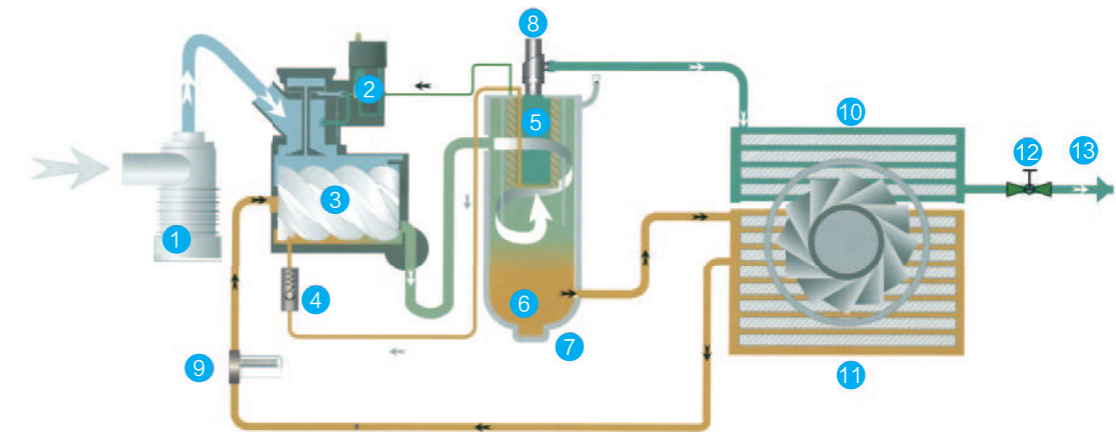
SHAFT SEALING DEVICE

Our compressors have a mating metal-framed double-rimed fluoro rubber ring able to with stand some pressure and form a lubricatable shaft sealing device.The shaft liner is specially processed with our unique technology,with perfect sealing performance and super-long useful life.

No vibration and low noise interpret perfectly the genuine Germany make Big rotor,low speed of rotation,and direct connection Unlike other manufacturers of our kind,we have been specialized in development and manufacturing of various screw air compressors from the very inception instead of a manufacturer of screw compressors transited from the one of piston compressors.

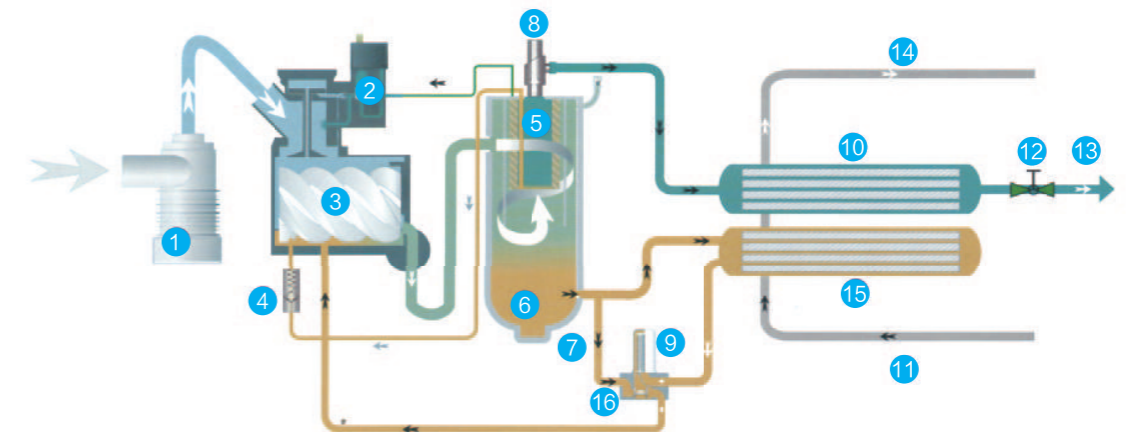
System Flow Diagram

Air cooling system flow diagram



Control Pipeline	1.air filter	6.oil	11.oil cooler
Air intake Line	2.air inlet valve	7.oil-air tank	12.ball valve
Oil Pipeline	3.air end	8.minimum pressure valve	13.air outlet
Air Pipeline	4.non-return valve	9.oil filter	
Oil/gas mixture	5.oil air separator element	10.after cooler	

Water cooling system flow diagram



Control Pipeline	1.air filter	7.oil-air tank	13.air outlet
Air intake Line	2.air inlet valve	8.minimum pressure valve	14.out of waterpipe
Oil Pipeline	3.air end	9.oil filter	15.oil cooler
Air Pipeline	4.non-return valve	10.after cooler	16.temperature-controlled valve
Oil/gas mixture	5.oil air separator element	11.into the waterpipe	
	6.oil	12.ball valve	

Internal Structure Diagram



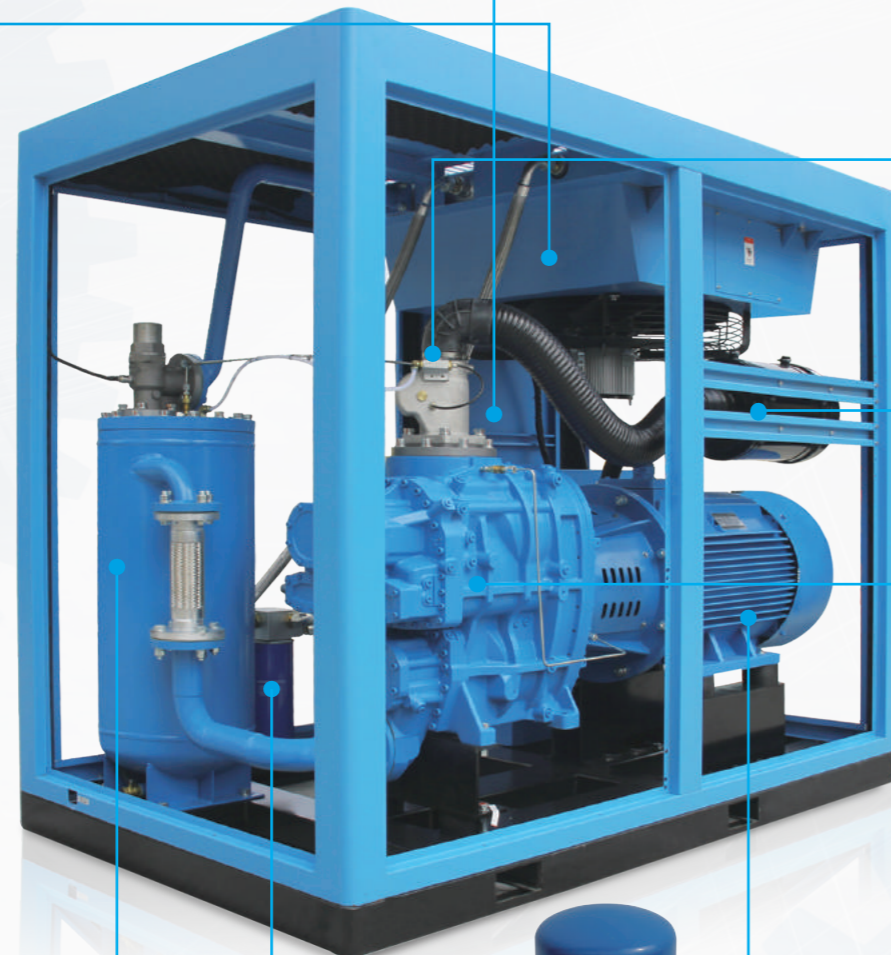
* Energy efficient cooling method

The cooler is located separately from the internal isolation of the chassis, so that the cooling fans would suck air with normal temperature from outside. Compared to cooling by using the air of 45~65°C inside the chassis, the cooling fans could save over 30% energy when the temperature of the air outlet decreases 3~8°C.



* Systematic Design of Oil separator

Special designed oil and air separation system ensures to lower pressure differential, thus reduces energy consumption. Equipped with advanced three-stage oil and air separation, the oil volume is controlled less than 3ppm to ensure the high quality of compressed air.



* Superior air inlet mode

The air filter inlet is designed to suck outside air of normal temperature. Compared with compressors of other brands which set up the air inlet inside chassis with air temperature at 45~65°C, the temperature of our air end significantly decreases by 3~10°C which greatly extended the life of the air compressor.



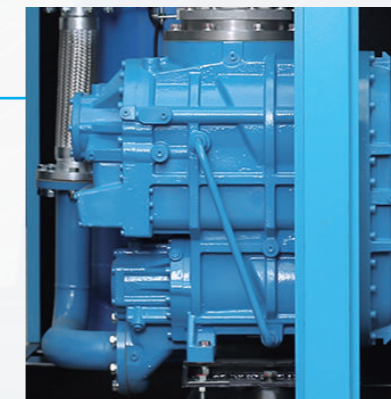
* Intelligent control

Advanced variable frequency control system, the industry leading fully automatic control center for time switch and electric components are all chosen from world renowned electric products. High performance converter, small starting impact, avoid starting overload.



* Air inlet valve

Depending on specific demands for terminal air supply, thus reducing the energy consumption. The non-return valve is disposed in an air inlet valve to prevent backflow of air and oil in case of unexpected halt. Several kinds of valves can be applied to stationary or portable compressors.



* Two stage compression

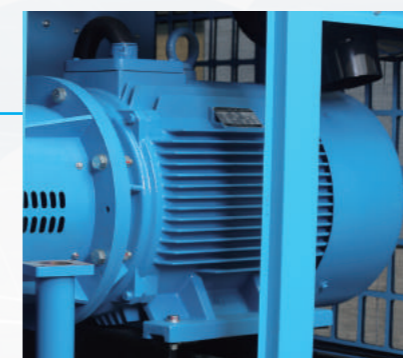
Excellent SKF bearings are adopted for compressor air end to better improve their use efficiency, reduce abrasion and help to make the engagement more stable and smooth.

Professional customized two stage compression air end, reducing the compression ratio of each stage and reducing internal leakage, improving volume efficiency, decrease bearing load and improving air end life.



* Air filter

Original imported filter material, high efficiency three levels air separator, keep internal cleanliness of the system effectively.



* Good sealing performance

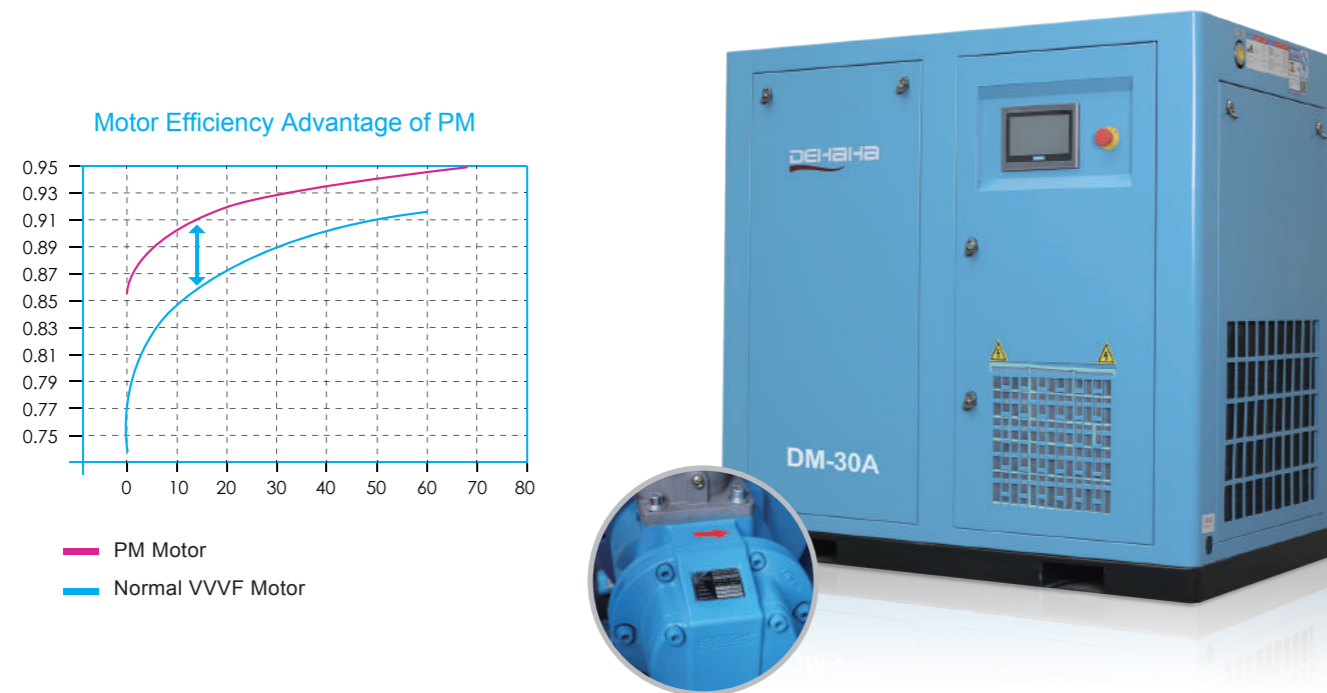
Professional customized high efficiency permanent magnet motor, protection grade: IP65, Good sealing performance has been a goal. We pursue Immutably unique process design and material application free you from the headaches of common faults in air compressors such as oil leakage, air leakage, etc.

Permanent Magnet Frequency Screw Air Compressor

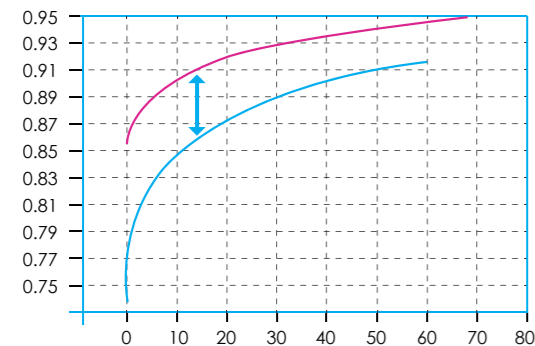
Introduction of Permanent Magnet Frequency Compressor

The permanent magnet variable frequency compressor is a most recent compressor with excellent quality and high efficiency and energy saving at present.

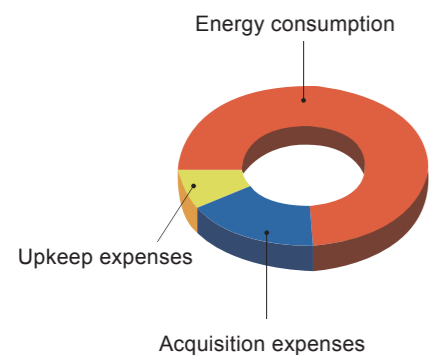
It is an advanced technique owned by only a few advanced countries and zones in the world. It is a high-end tendency for the future compressor development. The design concept and technical measure has broken through the traditional technical concept. It integrates the most sophisticated and energy saving technical factors.



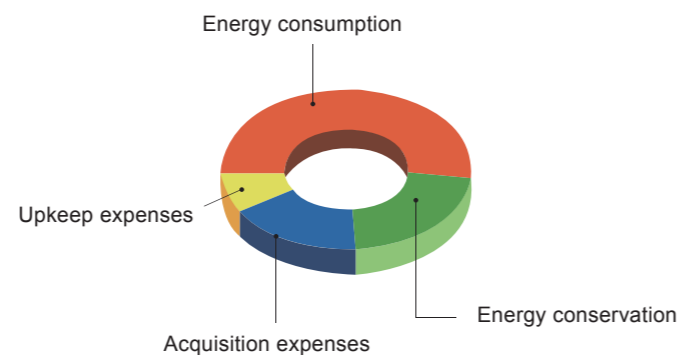
Motor Efficiency Advantage of PM



— PM Motor
— Normal VVVF Motor



Ordinary air compressor cost structure



Permanent magnet variable frequency compressor air compressor cost structure

Advantages of Permanent Magnet Frequency Compressor

Strong Support of Frequency Converter to Compressor

The permanent magnet frequency compressor is equipped with special frequency converter with wider frequency converting range. With the rapid development of techniques, the frequency compressor has become a high-grade machine in the energy saving area. It can realize maximum energy saving effect with the permanent magnet motor.

Excellent Quality of Motors, Significant Energy Saving Effect

The permanent magnet variable frequency compressor is equipped with high efficiency permanent magnet motor (PM motor). Compared to normal motors, PM motor has smaller volume and more excellent energy saving.

It will exert incomparable energy saving effect than normal inductive motor when installed with the special frequency converters.

It uses high performance NdFeB magnets which will not loss magnet even at 120°C, and the service life can be up to 15 years.

The stator winding can be of special corona resistant wire for frequency converters with excellent insulation performance.

As the magnetic conductivity of rotors is very high, the diameter is very small and able to be installed at the extending shaft of the male rotor, without use of bearing, thus eliminating the faults of motor bearing and improving the driving efficiency.

Technical Parameters

Model	Volume flow m ³ /min					Power (KW)	Noise (DB)	Outlet diameter	Dimension (mm)			Weight (kg)
	0.6Mpa	0.7Mpa	0.8Mpa	1.0Mpa	1.3Mpa				Length	Width	Height	
DM-10A	/	1.3	1.2	1	/	7.5	63	G3/4	895	590	970	190
DM-20A	2.55	2.4	2.3	2.0	/	15	65	G3/4	1062	690	1000	236
DM-30A	4.5	4.15	3.7	3.2	/	22	68	G1	1330	830	1265	410
DM-40A	6	5.7	5.2	/	/	30	68	G1	1330	830	1265	520
DM-50A	7.35	6.9	6.5	5.6	4.9	37	69	G1 1/2	1500	940	1415	655
DM-60A	8.7	8.1	7.5	6.75	5.9	45	70	G1 1/2	1500	940	1415	730
DM-75A	11.2	10.3	9.5	/	7.8	55	70	G2	1600	1060	1470	950
DM-100A	13.6	13	12.8	11	9.5	75	72	G2	2000	1120	1590	1070
DM-125A	17.2	16.7	15.5	14.0	12.5	90	72	G2	2000	1120	1590	1221
DM-150A	21.5	20.8	19.6	17.8	15.5	110	72	DN65	2400	1630	1980	1950
DM-175A	24.6	24.1	23.2	19.5	17	132	72	DN65	2400	1630	1980	2150
DM-220A	30.2	28.8	27.8	23.0	20	160	72	DN80	2800	1828	2150	3620
DM-250A	34.9	33.2	31.2	27.5	25.8	185	72	DN80	2800	1828	2150	3920

Direct Driven Screw Air Compressor



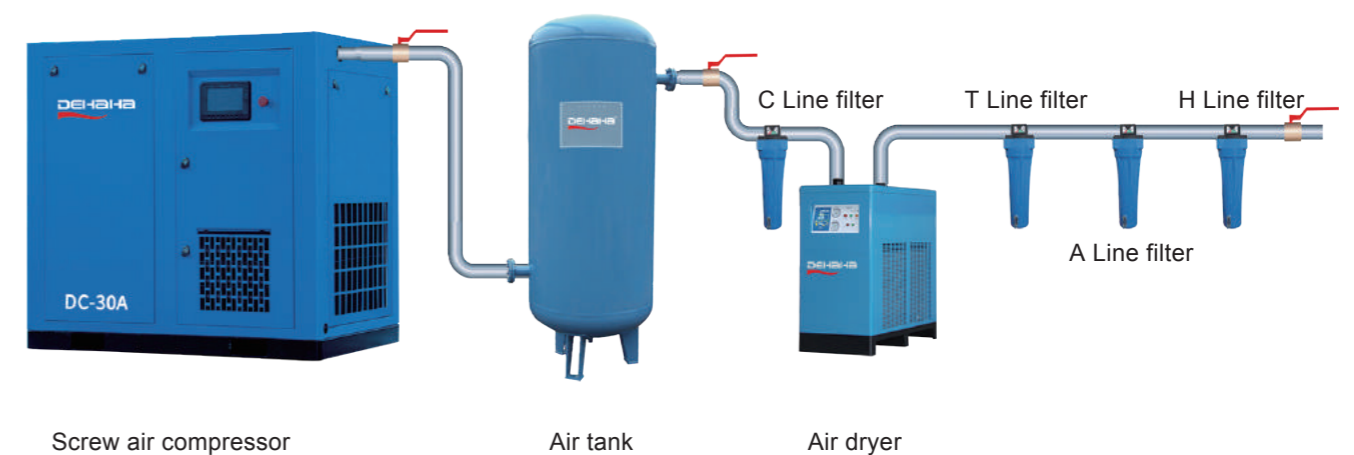
Technical Parameters

Model	Volume flow m ³ /min				Power (KW)	Noise (DB)	Outlet diameter	Dimension (mm)			Weight (kg)
	0.7Mpa	0.8Mpa	1.0Mpa	1.3Mpa				Length	Width	Height	
DC-30A	3.7	3.6	3.2	/	22	68	G1	1330	830	1265	400
DC-40A	5.2	5	/	3.3	30	68	G1	1330	830	1265	500
DC-50A	6.5	6.2	5.6	4.9	37	69	G1 1/2	1500	940	1415	655
DC-60A	8.0	7.3	6.0	5.9	45	70	G1 1/2	1500	940	1415	730
DC-75A	10.1	9.5	8.7	7.3	55	70	G2	1600	1060	1470	945
DC-100A	13.6	12.8	11.3	9.2	75	72	G2	2000	1120	1590	1291
DC-125A	16.1	15.5	13.6	12.5	90	72	G2	2000	1120	1590	1421
DC-150A	21.2	19.6	17.8	15.5	110	72	DN65	2400	1630	1980	2170
DC-175A	24.1	23.2	19.5	17.8	132	72	DN65	2400	1630	1980	2350
DC-220A	28.8	27.8	23.0	20	160	72	DN80	2800	1828	2150	3620
DC-250A	32.5	31.2	27.5	25.8	185	72	DN80	2800	1828	2150	3920
DC-275A	34.5	34.0	30.5	28.0	200	76	DN80	2800	1828	2150	4200
DC-300A	36.8	34.7	31.5	29.5	220	76	DN100	3000	1900	1930	4800
DC-350A	43.0	41.5	38.0	34.9	250	76	DN100	3000	1900	1930	5200
DC-375A	51.3	50.6	46.0	41.5	280	82	DN100	4360	2150	2258	7500
DC-420A	56.8	55.9	50.1	42.0	315	82	DN125	4360	2150	2258	7500
DC-475W	66.1	65.4	55.1	46.0	355	82	DN125	4360	2150	2258	8000
DC-525W	75.1	74.3	64.5	54.0	400	82	DN125	4360	2150	2258	8200

Advantages of direct driven air compressor

- Air end**
 Adopting the world's new generation of line air end, the center bracket of precision technology, make the motor and the air end permanently centered, and the efficiency is higher.
- Coupling**
 High-quality coupling elastomer to cushion the unbalanced torque during operation and compensate. The high-quality materials make it have good wear resistance and more effective absorption of vibration during rotation, thus achieving low noise.
- Exhaust pipe**
 The exhaust pipe adopts double-layer bellows, and the oil passage adopts special temperature resistance of 125 °C high-pressure hose.
- Human-machine LCD**
 Humanized design, Chinese and English LCD human-machine interface, easy to operate.
- Adaptable**
 For some areas with poor operating conditions such as high temperature and high humidity, large-area plate heat exchangers and high-efficiency air coolers are used.

Air compressor installation flowchart



Belt Driven Screw Air Compressor

Control Panel

Intelligent microcomputer-based control technology can monitor and control in all aspects machine following your instructions. Remote control realizes unattended operation, and the user-friendly human-machine interface displays instructions and parameters in written form, also, it has the function of self diagnose faults, give warning and automatically regulate the capacity.

Oil filter

Rotary filters are applied to completely remove the impurities in the lubricating oil, easy to replace and free of oil impregnate.

Cooler

It is designed for low temperature difference to increase heat exchange area, and ideal to be applied to high-temperature and high-humidity operating environment.

Motor

First-class motors are adopted, with the level of protection being Ip54 and insulation level being F.

Acoustic enclosure

It is designed into fully-closed mute box, in which sound-absorbing sponge are attached for effective absorption of noise, thereby making the noise 3-5db (A) lower than that made by the compressors of the same kind. It is reasonably structured overall and very easy to maintain and repair.

Belt driven

Germany made belts, driving efficiency can reach 99%, also has special BCA automatic fore adjustment device, to ensure constant transmission efficiency and excellent driving system reliability.

Technical Parameters

Model	Volume flow m ³ /min				Power (KW)	Noise (DB)	Outlet diameter	Dimension (mm)			Weight (kg)
	0.7Mpa	0.8Mpa	1.0Mpa	1.3Mpa				Length	Width	Height	
DB-7.5A	0.91	0.84	0.75	0.63	5.5	65	G3/4	780	680	800	320
DB-10A	1.30	1.20	1.00	0.84	7.5	65	G3/4	780	680	800	350
DB-15A	1.70	1.60	1.40	1.20	11	65	G3/4	1100	800	980	430
DB-20A	2.40	2.30	2.00	1.60	15	68	G3/4	1100	800	980	460
DB-25A	3.00	2.90	2.70	2.30	18.5	68	G1	1250	870	1180	620
DB-30A	3.70	3.60	3.20	2.80	22	68	G1	1250	870	1180	680
DB-40A	5.20	5.00	4.50	3.80	30	69	G1	1250	870	1180	790
DB-50A	6.50	6.20	5.60	4.90	37	69	G1 1/2	1540	950	1290	920
DB-60A	8.00	7.30	7.00	5.90	45	70	G1 1/2	1540	950	1290	1050



DBF/DCF Variable Frequency Screw Air Compressor

DEHAHA variable frequency screw air compressor

DEHAHA variable frequency screw compressor equipped with special customized inverter system, using the latest technology IGBT4 chip, has thermostability, reliable quality, long service life etc., energy-saving effect is always leader in the world.

Energy-saving principle

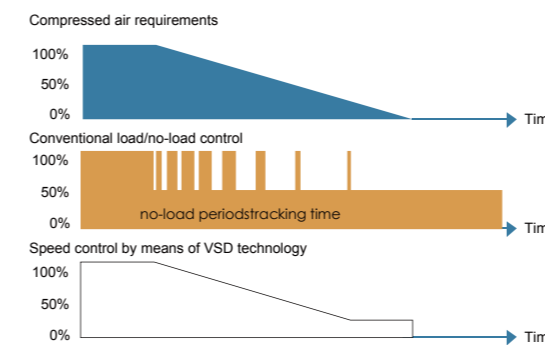
Due to the electrical machine rotate speed and the air compressor's actual power consumption have made into a power relations, reducing the motor speed will reduce actual power consumption, variable frequency air compressor, adopting pressure sensor to instantly induction system in actual use pressure and air capacity, through control of the electrical and frequency converter, to change compressor speed, through no changing the air compressor motor torque circumstances (namely the output power), which regulates the system pressure, so as to realize the compressed air on-demand output. When the system is low, the air capacity space-time co capacity compressor provide compressed air quantity greater than system air, frequency conversion air compressor reduce output compressed air volume, conversely improve click RPM increases compressed air quantity to maintain stability of the system pressure value.



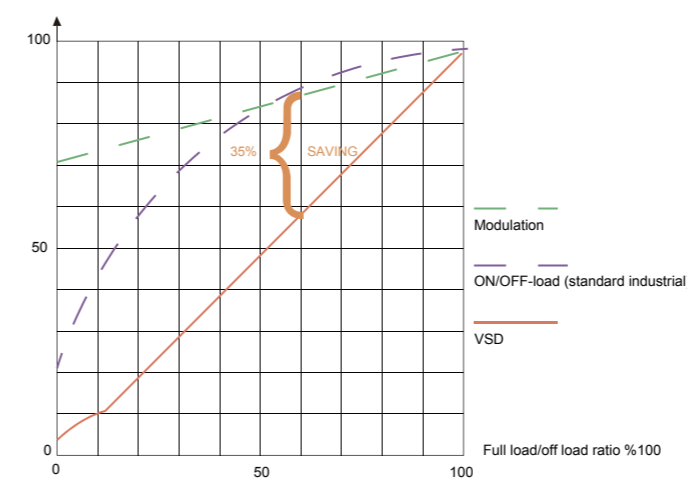
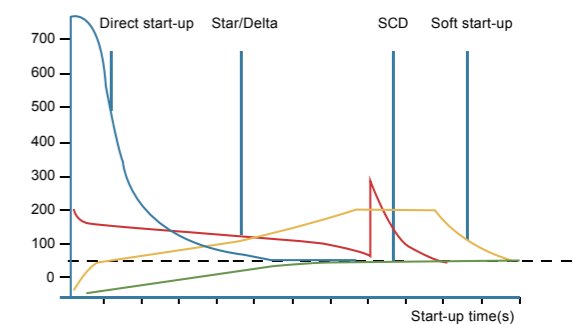
Main Features Of Variable Frequency Screw Air Compressor

1. Save electricity - to save money.
2. Maintenance cost is reduced greatly.
3. Supply constant pressure gas, improve production efficiency and production quality.
4. Improve produce gas efficiency about 5% to 15%.
5. Prolong the service life of compressor, from the 10-15 years increased to 15-20 years.
6. Improve transformer and grid operation effect.
7. To reduce noise.
8. Price advantage.
9. Quality guarantee.

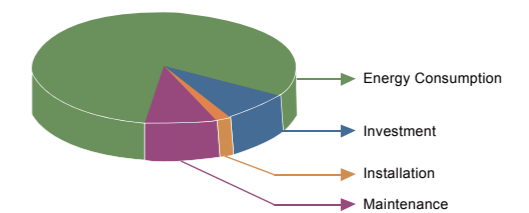
Adjusts volumetric flow rate exactly



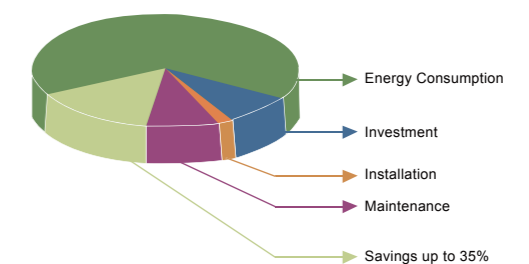
Electric current(A)



Cost Structure of a Load/Unload Controlled Compressor



Cost Structure of a Variable Speed Controlled Compressor



Combined Screw Air Compressor

The combined (integral) screw air compressor integrates components such as a screw compressor, a refrigerating dryer, a confidential filter and air tank. The user is easy to install, simple to use, and flexible to move.

After the air is integrated into the system, the air quality is significantly optimized to meet the process needs of each company.

Beautiful appearance, reliable performance and superior economy are one of the series exported by our company.



Technical Parameters

Model	Volume flow m ³ /min			Power (KW)	Noise (DB)	Outlet diameter	Dimension (mm)			Weight (kg)	Tank (L)
	0.7Mpa	0.8Mpa	1.0Mpa				Length	Width	Height		
DCY-7.5A	0.86	0.84	/	5.5	63	G3/4	1232	590	1371	258	140
DCY-10A	1.30	1.20	1.00	7.5	63	G3/4	1232	590	1371	258	140
DCY-15A	/	1.60	/	11	65	G3/4	1480	688	1520	388	260
DCY-20A	2.40	2.30	1.8	15	65	G3/4	1480	688	1520	395	260

4-in-1 Screw Compressor+ Air tank+air dryer+ line filter, filters can be added or reduced according to demand.

Technical Parameters

Model	Volume flow (m ³ /min)				Power (kw)	Noise (db)	Outlet diameter	Dimension (mm)			Weight (kg)	Tank (L)
	0.7Mpa	0.8Mpa	1.0Mpa	1.3Mpa				Length	Width	Height		
DBZY-7.5A	0.91	0.84	0.75	/	5.5	65	G3/4	1418	700	1500	375	260
DBZY-10A	1.30	1.20	1.00	0.84	7.5	65	G3/4	1418	700	1500	395	260
DBZY-15A	1.70	1.60	1.40	1.20	11	65	G3/4	1882	790	1731	560	500
DBZY-20A	2.40	2.30	1.80	1.60	15	65	G3/4	1882	790	1731	572	500
DMZY-10A	1.30	1.20	1.00	0.84	7.5	65	G3/4	1418	700	1500	395	260
DMZY-20A	2.40	2.30	1.80	1.60	15	65	G3/4	1882	790	1731	572	500

Two-stage Screw Air Compressor

High efficiency two stage compressed air end

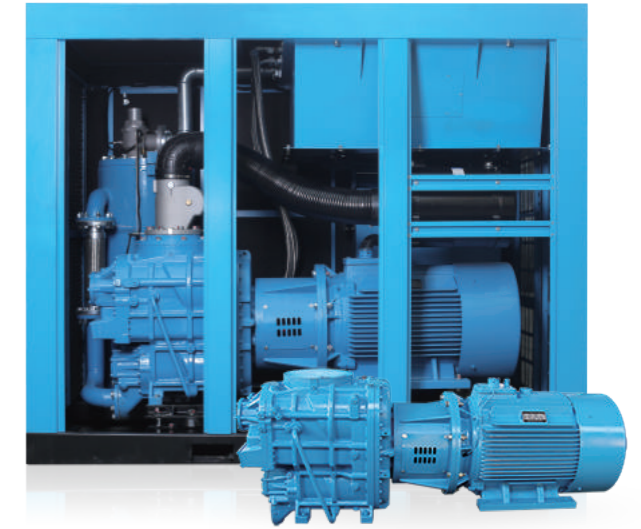
The rotor adopts the patented line, which ensures the accuracy of the rotor profile, high reliability and effectiveness, low noise and low vibration, and the two-stage compression reduces the single stage compression ratio. The bearing load is reduced and the life of the main engine is improved.

High efficiency asynchronous motor

The air-cooled special motor has lower input power than the whole machine, effectively preventing dust and moisture from entering the motor, and SKF bearing ensures long term continuous trouble free operation.

Super level 1 energy efficiency

The energy efficiency level over level 1, the unit input power is small, the product reaches the international advanced level, the most energy saving, the lowest energy consumption.



Technical Parameters

Model	Volume flow (m ³ /min)				Power (kw)	Noise (Db)	Outlet diameter	Dimension (mm)			Weight (kg)
	0.7Mpa	0.8Mpa	1.0Mpa	1.3Mpa				Length	Width	Height	
DD-75	13.6	12.3	10.0	/	55	70	G2	2300	1300	1830	1534
DD-100	17.4	15.5	12.8	10.0	75	72	G2	2300	1300	1830	1700
DD-125	20.7	19.5	16.0	13.0	90	72	DN65	2400	1630	1980	2630
DD-150	24.8	24.0	20.0	15.0	110	72	DN65	2400	1630	1980	2737
DD-175	29.0	28.0	23.0	18.5	132	78	DN80	2800	1828	2150	4850
DD-220	34.0	33.5	27.8	23.0	160	78	DN80	2800	1828	2150	5000
DD-250	39.0	38.0	33.3	27.5	185	78	DN100	4100	1960	2000	5900
DD-275	43.0	42.5	38.2	33.0	200	78	DN100	4100	1960	2000	6200
DD-300	51.5	47.0	42.0	38.0	220	80	DN125	4260	2155	2170	8500
DD-350	54.0	51.0	45.5	41.0	250	80	DN125	4260	2155	2170	8650
DD-375	60.0	57.0	50.5	43.0	280	82	DN125	4350	2182	2200	8750
DD-375W	60.0	57.0	50.5	43.0	280	82	DN125	3900	2200	2250	8550
DD-400W	67.0	65.6	56.0	47.0	315	82	DN125	3900	2200	2250	8850
DD-450W	73.0	72.0	62.0	50.0	355	82	DN125	3900	2200	2250	8970

Two-stage Permanent Magnet Screw Air Compressor

- The two stage compressed air-end reduces the compression ratio of each stage, reduces the internal leakage, improves the volume efficiency, reduces the bearing load and improves the service life of the main engine.
- The two-stage compression instead of the single stage compression, the exhaust volume increased by nearly 15%, which can achieve 15% energy saving effect.
- The compression ratio of each stage reduces the bearing load by precise design.
- Each stage has smaller compression ratio, smaller leakage, higher volumetric efficiency, lower vibration and lower noise.
- Under the same efficiency, the load is borne by two heads, and the bearing is small and the life is longer.

MORE POWER SAVING

Efficient air end
Efficient motor drive
Frequency conversion control system

LOW NOISE

Large rotor low speed
Direct drive shock
Host intake silencer design

MORE SECURE

Imported SKF bearings
First class processing
Intelligent control

Technical Parameters

Model	Volume flow (m ³ /min)				Power (kw)	Noise (db)	Outlet diameter	Dimension (mm)			Weight (kg)
	0.7Mpa	0.8Mpa	1.0Mpa	1.3Mpa				Length	Width	Height	
DDM-60	10.5	10.3	7.3	6.1	45	70	G2	2000	1120	1590	1560
DDM-75	13.6	12.3	10.2	7.0	55	70	G2	2300	1300	1830	1780
DDM-100	16.0	15.5	12.8	10.2	75	72	G2	2300	1300	1830	2000
DDM-125	20.7	19.5	16.2	13.2	90	72	DN65	2400	1630	1980	2700
DDM-150	24.8	24.0	20.2	15.2	110	72	DN65	2400	1630	1980	3000
DDM-175	29.0	28.0	23.2	18.7	132	78	DN80	2800	1828	2150	4850
DDM-220	34.0	33.5	28.0	23.3	160	78	DN80	2800	1828	2150	5000
DDM-250	39.0	38.0	33.5	27.7	185	78	DN100	4100	1960	2000	5900
DDM-275	43.0	42.5	38.3	33.3	200	78	DN100	4100	1960	2000	6200
DDM-300	51.5	47.0	42.4	38.3	220	80	DN125	4260	2155	2170	8500
DDM-350	54.0	51.0	45.8	41.4	250	80	DN125	4260	2155	2170	8650

Energy-saving Principles

The oil injection screw air compressor adopts two-stage compression to improve the energy efficiency of the compressor. The two-stage compression screw air-end adopts two-stage compression, namely first stage compression and second stage compression. After the first stage compression, oil and gas mixing can be fully carried out between stages, reducing the two-stage compression suction temperature, thereby reducing power consumption.



Customer case



High (Normal) Inlet Temperature Air-cooling Refrigerated Air Dryer



High (Normal) Inlet Temperature Air-cooling Refrigerated Air Dryer

The front air-cooling pre-cooler and the condenser in the cooling system use the forced ventilation system for cooling. The advantages for air cooling system are easy to install and maintain, little early investment, low operation cost, suitable for the conditions with comfortable environment temperature and good ventilation, especially suitable for the areas free of water or short of water resources. The machine uses a high quality fan motor, mostly applied to the low load and movable situations, which are largely influenced by the environment temperature.

Working condition and technical data

Inlet temperature: $\leq 80^{\circ}\text{C}$ (45°C)
 Cooling method: air-cooling
 Inlet pressure: 0.7~1.6Mpa
 Dew point: $2^{\circ}\text{C} \sim 10^{\circ}\text{C}$
 Atmospheric dew point: $-23^{\circ}\text{C} \sim 17^{\circ}\text{C}$

Technical Parameters

Model	Capacity (Nm ³ /min)	Voltage (V/Hz)	Refrigerating power (HP/KW)	Caliber of air pipe	Dimension (mm)			Weight (kg)
					Length	Width	Height	
DHH-TR01	1.2	220/50	0.37	RC3/4"	480	380	665	50
DHH-TR02	2.4	220/50	0.52	RC3/4"	520	410	725	80
DHH-TR03	3.6	220/50	0.73	RC1"	580	460	785	105
DHH-TR06	6.5	220/50	1.26	RC1"	700	540	910	150
DHH-TR08	8.5	220/50	1.87	RC2"	770	590	990	160
DHH-TR10	11	220/50	2.43	RC2"	770	590	990	240
DHH-TR12	13.5	220/50	2.63	RC2"	800	610	1030	260
DHH-15NF	17	380/50	4.20	DN 65	1450	710	1200	310
DHH-15NW	17	380/50	4.05	DN 65	1450	710	1200	310
DHH-20NF	20	380/50	5.50	DN 80	1550	950	1450	400
DHH-20NW	20	380/50	5.30	DN 80	1550	950	1450	400

High Inlet Temperature Water-cooling Refrigerated Air Dryer



The front air-cooling pre-cooler and the condenser in the cooling system use cooling method with chilled water, mainly used to the situation with good water supply conditions, high inlet temperature and large air processing amount. As it is lightly influenced by the environment temperature, the dew point of air at the outlet is stable. The heat exchange tube is of high efficiency finned tube. The chilled water flows through the tube side. The scale produced with the time can be easily removed. The freon flows through the shell side, which keeps the efficiency of condenser in good condition.

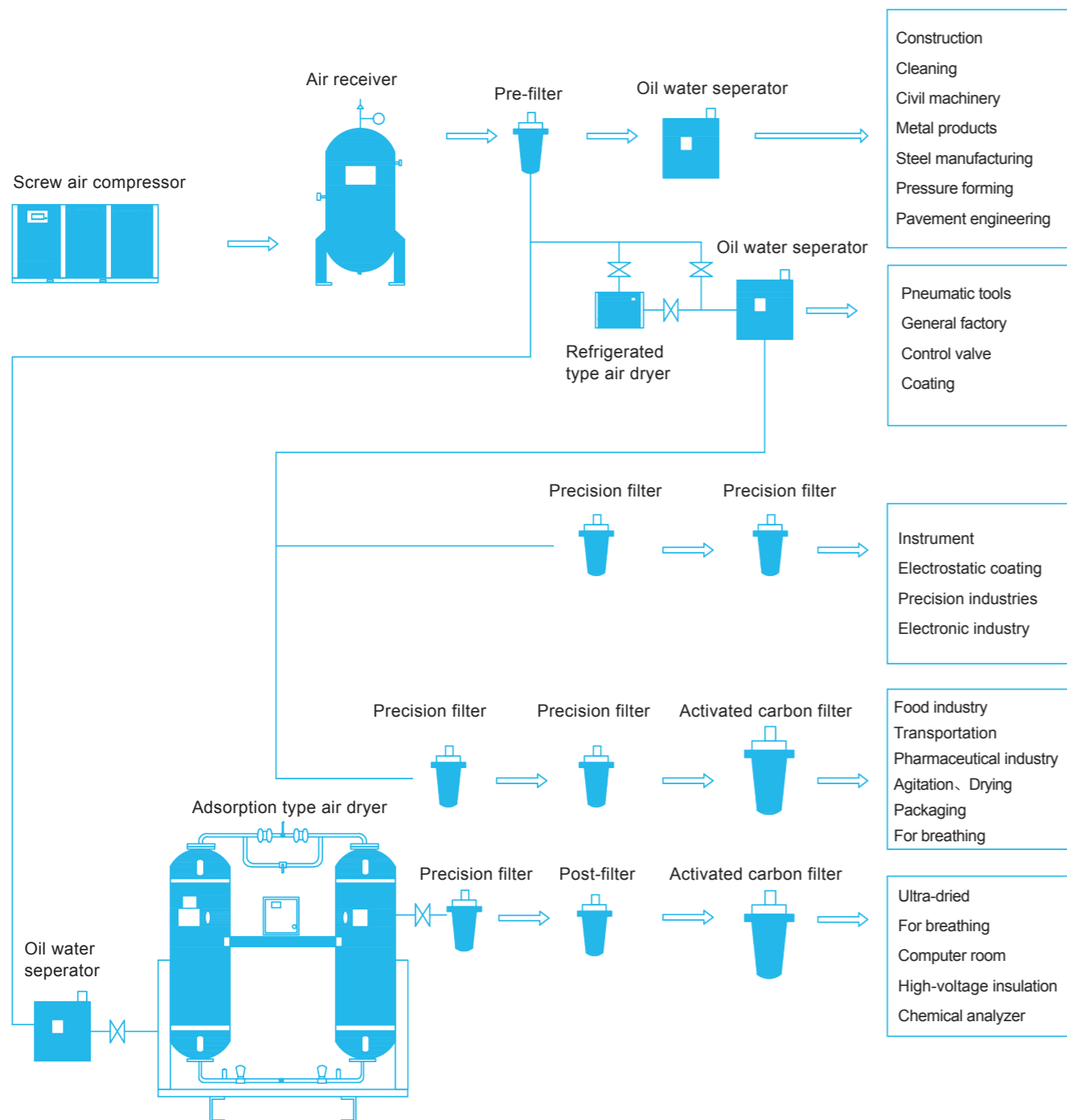
Working condition and technical data

Inlet temperature: $\leq 80^{\circ}\text{C}$ (45°C)
 Cooling method: water-cooling
 Inlet pressure: 0.7~1.6Mpa
 Dew point: $2^{\circ}\text{C} \sim 10^{\circ}\text{C}$
 Atmospheric dew point: $-23^{\circ}\text{C} \sim 17^{\circ}\text{C}$

Technical Parameters

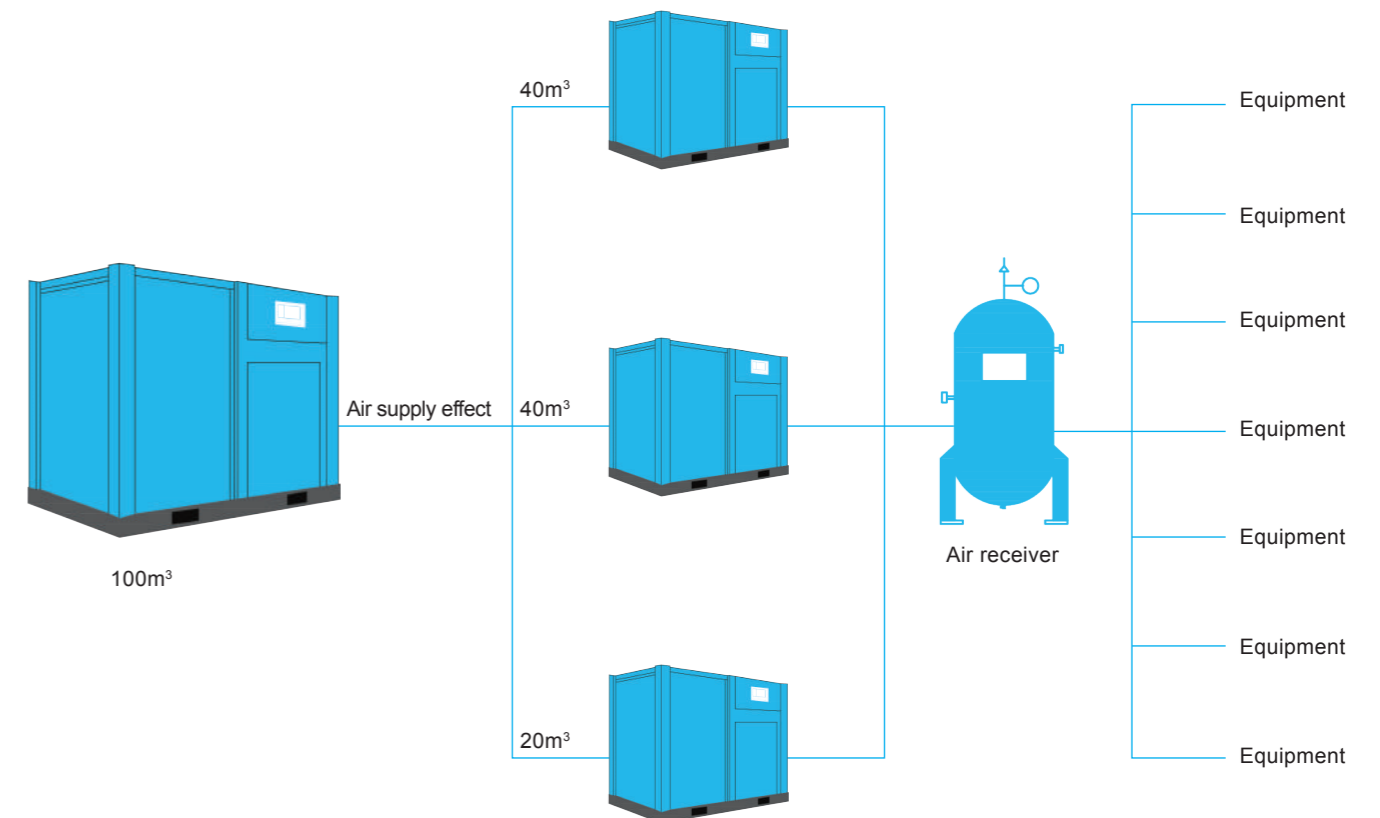
Model	Capacity (Nm ³ /min)	Voltage (V/Hz)	Refrigerating power (HP/KW)	Caliber of air pipe	Dimension (mm)			Weight (kg)
					Length	Width	Height	
DHH-25NF	27	380/50	4.00	DN80	1100	950	1300	450
DHH-25NF	27	380/50	4.00	DN80	1100	950	1300	450
DHH-30NF	34	380/50	5.50	DN100	1200	1000	1550	780
DHH-30NW	34	380/50	5.50	DN100	1200	1000	1550	780
DHH-40NF	45	380/50	6.30	DN100	1250	1000	1650	820
DHH-40NW	45	380/50	6.30	DN100	1250	1000	1650	820
DHH-50NF	55	380/50	7.50	DN125	1250	1100	1650	900
DHH-50NW	55	380/50	7.50	DN125	1250	1100	1650	900
DHH-60NF	65	380/50	9.20	DN125	1600	1100	1800	1100
DHH-60NW	65	380/50	9.20	DN125	1600	1100	1800	1100
DHH-80NF	85	380/50	11.20	DN125	1650	1200	1880	1600
DHH-80NW	85	380/50	11.20	DN125	1650	1200	1880	1600
DHH-100NF	110	380/50	22	DN150	2500	1250	2200	2004
DHH-100NW	110	380/50	22	DN150	2500	1250	2200	2004

Planning Of Screw Air Compressor System



Reasonable Configuration Of Screw Air Compressor

Air supply diagram



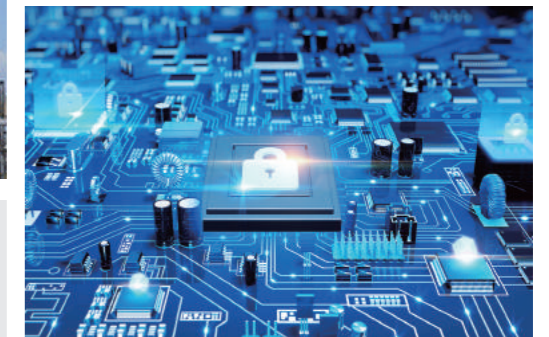
Do you know how to select an air source correctly? Now suppose you need one 100m³ compressor, how do you decide on it? Buy a 100m³ compressor? 100m³ compressors are hardly available in the market and cost too much and the operation cost is even higher actually. In case of a fault, it takes long to repair and on the other hand, we do not have an easy and timely access to spare parts, which suggests greater losses behind. However, it is good for you to purchase two 40m³ compressors and one 20m³ compressor and operate them in parallel. By so doing, you can achieve the effect equivalent to one 100m³ compressor but save much maintenance cost for the sufficient availability of spare parts and short downtime. Also, that three compressors fail at the same time is merely once in a blue moon. One compressor fails but the other two can at least maintain the operation of 60% of the entire production line, and you can also shut down one compressor in case of a drop in air use so as to reduce power consumption.

Scientific and rational configuration of the equipment (not merely compressors) your desire is a prelude to reducing operation cost, improving working efficiency and advancing production and management.

Dehaha Qualification Honor



Screw Air Compressor Application Industry



Air compressors are widely used in all walks of life to meet your various gas needs.

- | | |
|----------------------|---------------------|
| Industrial equipment | Metallurgy |
| Pipelines | Printing service |
| Oil&gas | Power plants |
| Plastics | Painting |
| Blow molding | Steel industry |
| Shipyard | Mechanical |
| Food industry | Thermal power plant |
| Furniture processing | Car manufacturer |
| Beverage factory | |

