

STABLE | ENERGY-SAVING | CLEAN | AND EFFICIENT



DMV-SAT series Full performance integrated laser cutting machine special Screw air compressor



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Dream(Shanghai) Compressor Co.,Ltd.

01



DMV-SAT series
Full performance integrated laser
cutting machine special
Screw air compressor

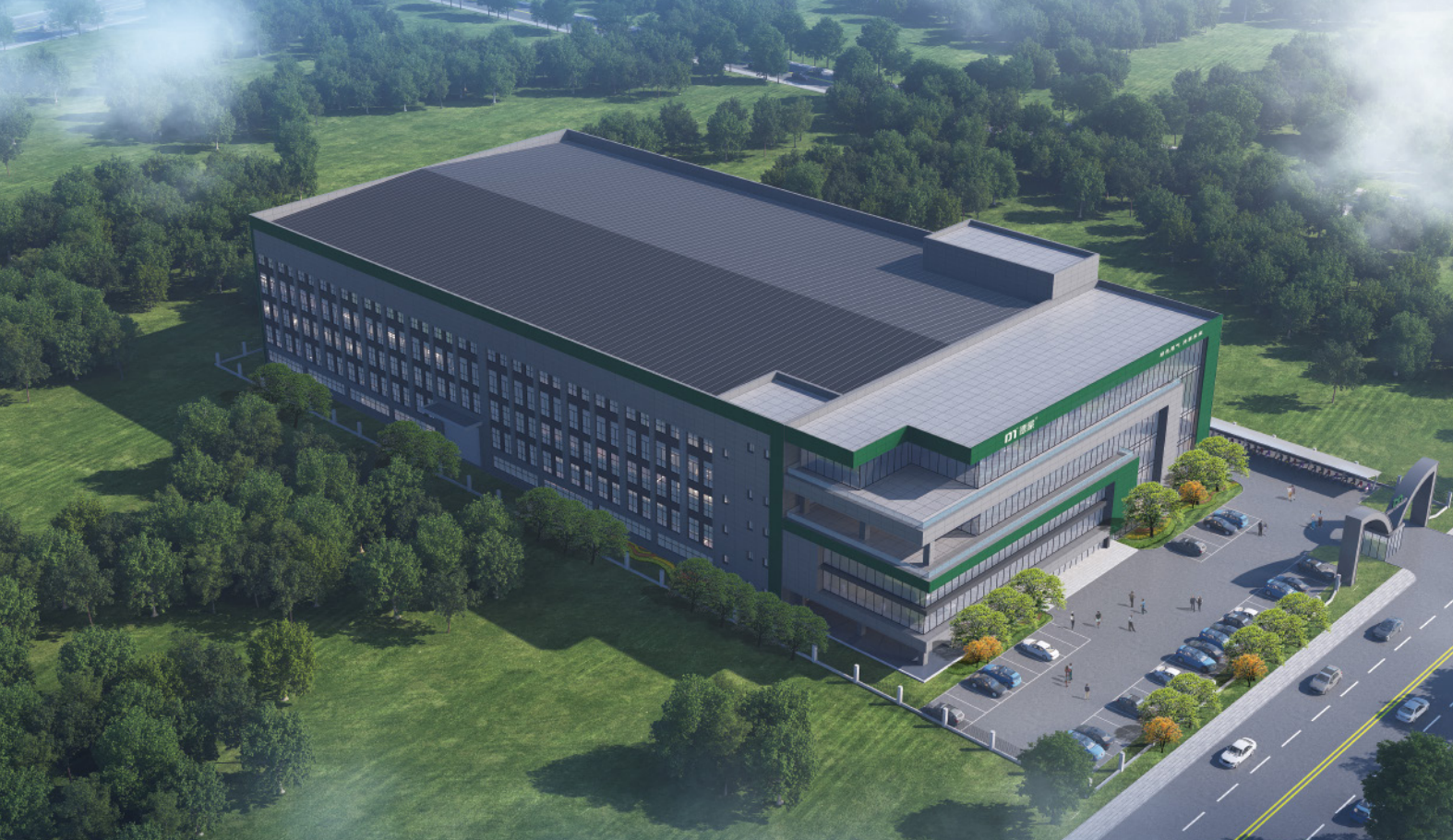
02



DMV-G Series
for Laser Cutting Machine
Screw Air Compressor

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ABOUT DREAM

 **45000** m²
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 worldwide 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.

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



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,Eu-rope,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.



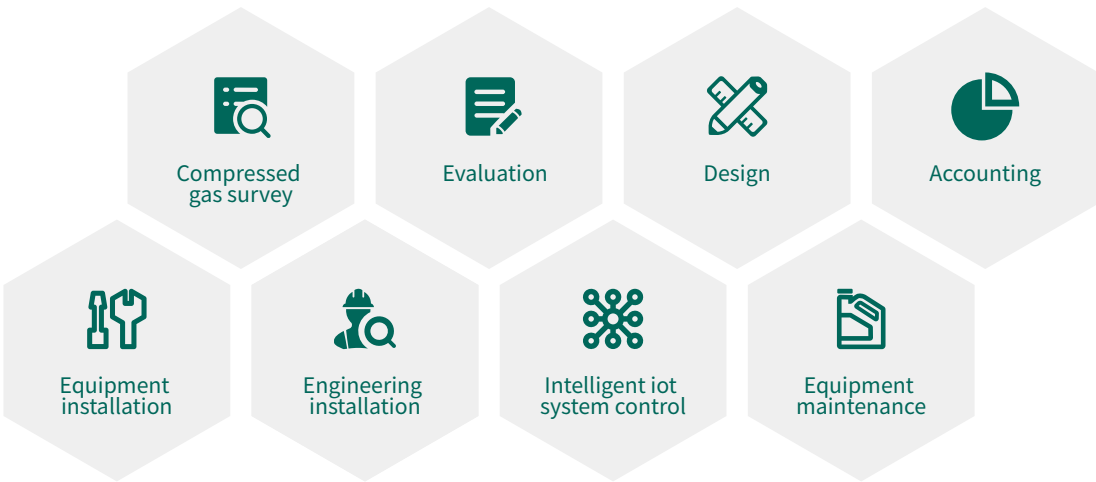
Dream Intelligent Manufacturing
Six core competencies



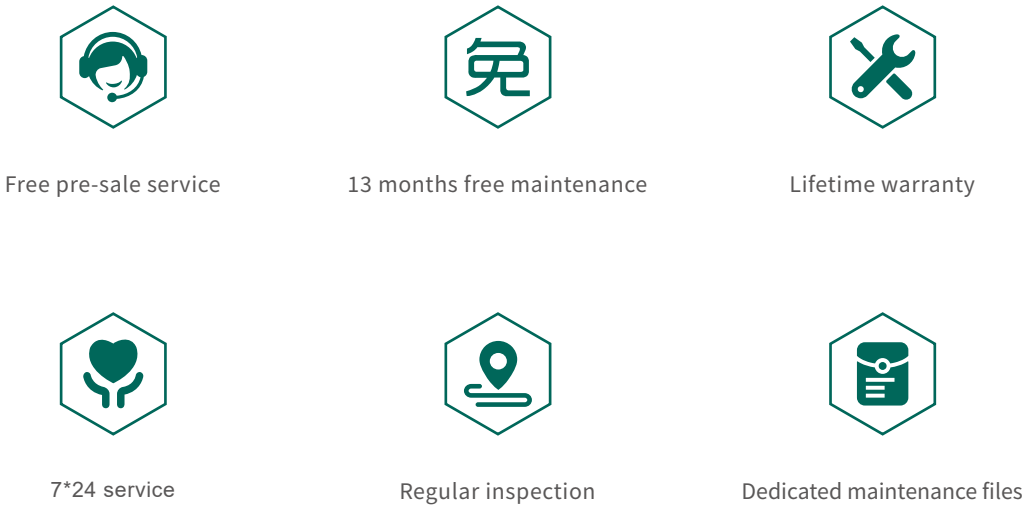
Full process cycle and service

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

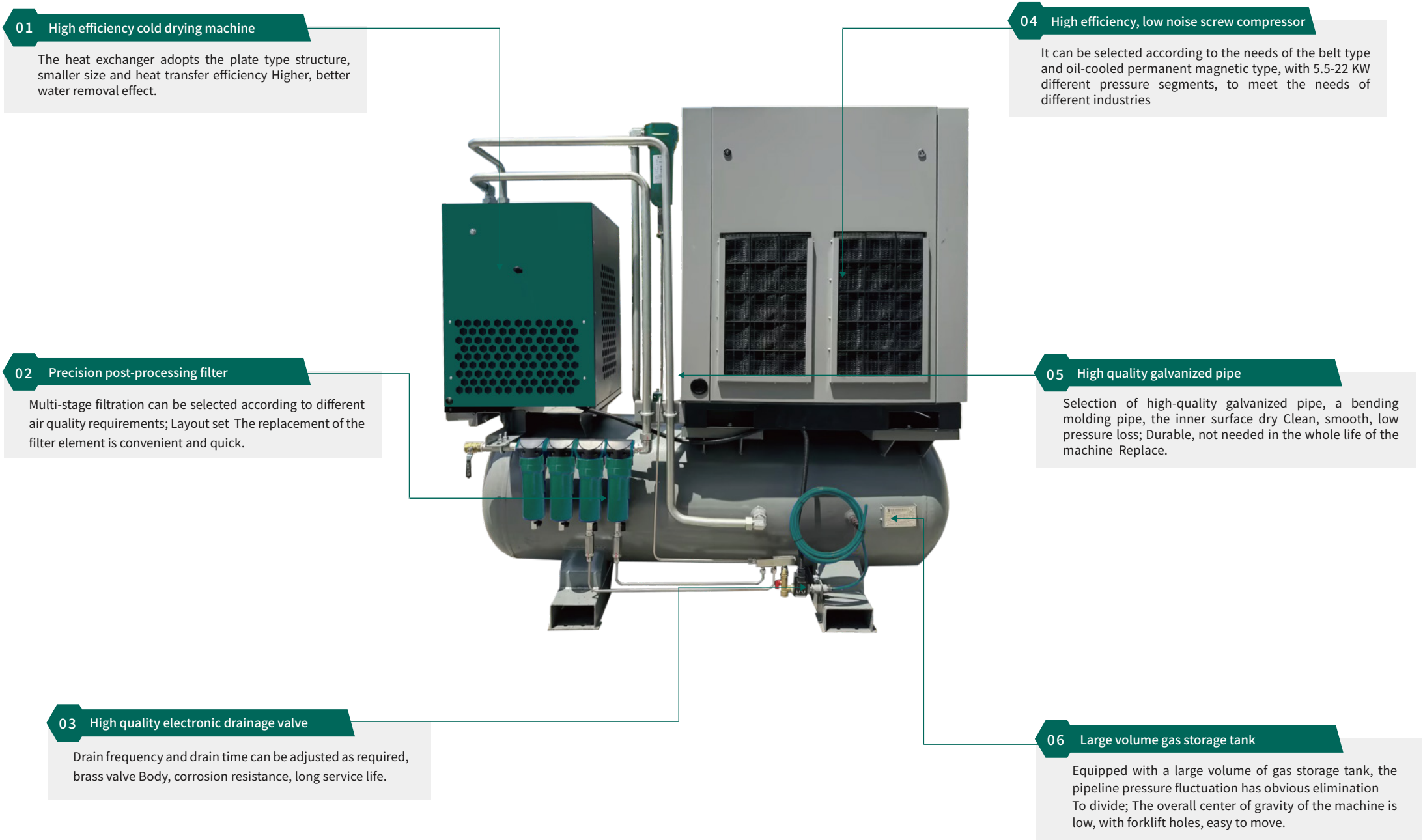


Performance pledge



Product features

DMV-SAT series
Full performance integrated
laser cutting machine special
Screw air compressor



Product features

DMV-G Series for Laser Cutting Machine
Screw Air Compressor

01 Durable, efficient and stable mainframe

- 1. Adopting the design idea of 'big rotor, big bearing, low speed' to reduce noise and vibration, increase the life and stability of the main machine. noise and vibration, increasing the life and stability of the machine.
- 2. The tooth surface is processed by rotor grinding machine, which creates high-precision rotor, which is the first guarantee for the high efficiency and stability of the main machine. The high precision rotor is the first guarantee of high efficiency and stability of the main machine.
- 3. Adopting new type 5:6 non-symmetrical rotor tooth pattern, high precision three-coordinate measuring machine, comprehensive measurement, increase the exhaust volume of 5-10%.



02 Dedicated manifolds

- 1. Special inlet valve for screw compressor, easy to start the unit, with automatic adjustment function, low flow rate, low pressure loss, reduce energy consumption, low inlet noise;
- 2. Reliable minimum pressure maintenance valve, low pressure loss, precise control, ultra-fast return to the seat, to ensure that the user does not flow back;
- 3. Temperature control valve (part): mixed-flow temperature control valve: the unit is equipped with mixed-flow temperature control valve to ensure that the unit is more convenient to start in a low-temperature environment, and to ensure that the unit is supplied with oil at all times; through the control of the host's oil supply temperature to ensure that the unit is in the best performance state.



03 High-efficiency permanent magnet motors

- 1. One-piece design, coaxial with the host anode rotor, no coupling and gear box, small energy efficiency loss, higher efficiency;
- 2. Made of 38UH magnet steel, strong magnetism, high temperature resistance, no loss of magnetism.



04 Low-noise cooling fans

- 1. IP44 cooling fan, F class insulation, inner rotor fan with higher air pressure, more sufficient air volume and better cooling effect.
- 2. Preferred fan blade type, low noise.



05 Stable and reliable electronic control system

- 1. Large-size colour LCD touch screen, with good human-machine communication interface, touch screen with anti-touch and sleep function.
- 2. Customised vector inverter, perfect match with motor, low frequency and high torque, can output 180% of rated torque.
- 3. Completely monitor the parameters of the machine, including voltage detection, three-phase imbalance detection, over-voltage, over-temperature, etc., without the need for specialised supervision.
- 4. Configuration of Internet of Things (IoT), you can check the running status of the machine on your mobile phone.
- 5. Independent air duct design, applicable to a variety of working conditions.



06 High quality triple filter

- 1. The filtration area of the air filter is more than 150% of the normal need, with low intake pressure loss and good energy efficiency;
- 2. The oil filter is made of enlarged imported glass fibre material, the rated capacity of the oil filter is ≥ 1.3 times of the circulating oil volume, high filtration precision and good durability;
- 3. The oil separator core made of imported glass fibre material has good filtration effect and low pressure loss of the oil separator core;
- 4. Reasonable design of the position of the three filters, easy maintenance and reduce downtime.





DMV-SAT Series

Full-performance integrated screw air compressor for laser cutting machine

Integrated four-in-one design compact structure, easy to install, connect the power supply and gas pipe can be used, simple maintenance, frequency conversion constant pressure design, reduce waste, 420L large gas storage tank design, equipped with DHV-A series air compressor, low noise operation.



Compact structure and easy installation



Just connect the power supply and air pipe to use



Easy maintenance



Frequency conversion and constant voltage design reduces waste



Large air tank design



Equipped with DHV-A series air compressor for low-noise operation

DMV-SAT series Full performance integrated laser cutting machine special Screw air compressor

DMV-SAT series	Working pressure		Capacity		power		noise	air outlet pipe diameter	net weight	dimensions(mm)		
	bar	psig	(m³/min)	cfm	kW	hp	dB		kg	length	width	height
DMV-15SAT	16	232	0.3-1.6	11-57	15	20	60±3	G1"	600	1813	827	1748
	18	261	0.55-1.23	19-43								
DMV-22SAT	16	232	0.5-2.4	18-85	22	30	60±3	G1-1/2"	730	1813	827	1748
	18	261	0.78-2.13	28-75								
DMV-30SAT	16	232	1.4-3.2	49-113	30	40	65±3	G1-1/2"	950	2250	1050	1850
	18	261	1.8-3.0	64-106								
DMV-37SAT	16	232	1.7-3.8	60-134	37	50	65±3	G1-1/2"	1100	2300	1150	1950
	18	261	1.8-3.6	64-127								

DMV-G Series for Laser Cutting Machine Screw Air Compressor

DMV-G series	Working pressure		Capacity		power		noise	air outlet pipe diameter	net weight	dimensions(mm)		
	bar	psig	(m³/min)	cfm	kW	hp	dB		kg	length	width	height
DMV-15G	16	232	0.3-1.6	11-57	15	20	62±3	G3/4"	280	880	820	1153
	18	261	0.55-1.23	19-43								
DMV-22G	16	232	0.5-2.4	18-85	22	30	64±3	G1-1/4"	375	880	820	1153
	18	261	0.78-2.13	28-75								
DMV-30G	16	232	1.4-3.2	49-113	30	40	65±3	G1-1/4"	680	1475	1060	1330
	18	261	1.8-3.0	64-106								
DMV-37G	16	232	1.7-3.8	60-134	37	50	65±3	G1-1/4"	710	1475	1060	1330
	18	261	1.8-3.6	64-127								

Application Scenario

Laser cutting machines must use shielding gas when processing. Air is of course a simple and economical shielding gas, and air compressors provide clean and dry compressed air. One part is combined with high-purity oxygen and high-purity nitrogen to form cutting gas and supplied to the cutting head (clean compressed air -- solenoid valve -- cutting head), one part is used as a power source to supply the cylinder of the clamping table, and then one part is used to purge and remove dust from the optical path system, respectively as cutting gas, cylinder power source and optical path positive pressure dust removal gas to maintain the normal operation of the laser cutting machine. Therefore, air compressors are indispensable for every laser cutting machine equipment and are also very important for laser cutting machines. Compressors can also be used in the coating and spraying industries. Air compressors provide compressed air for spraying equipment. Compressed air is the main power source of the air injection system. The compressed air flow is used to form paint mist through the nozzle and act on the surface of the object to achieve high-quality spraying effects.



Why do you need a pure dry air compressor?

Common faults of laser compressors

- 1 Burns inside the focusing lens barrel
- 2 The pressing thread of the focusing lens barrel is integrated with the thread
- 3 The focusing lens lens is seriously damaged
- 4 The protective lens window has water mist/oil stains
- 5 The capacitor connection sensing pin is damaged

The diagram illustrates the components of a laser cutting machine. A laser beam is directed through a reflector and a lens to a nozzle. Assisted gas is supplied to the nozzle. The nozzle moves in a specific direction to cut the material. The cutting surface is shown below the material to be cut.

If you want to do your work well, you must first sharpen your tools.

Compressed air contains water mist and oil, which will be sprayed onto the protective mirror at high pressure, which will seriously affect the transmission of the laser beam, disperse the focus, cause the product to be opaque, and produce waste.

The image shows two circular lenses. The left lens is labeled 'Uncontaminated lens' and appears clean. The right lens is labeled 'Contaminated lens' and is covered in a dark, granular substance.

When the laser cutting machine is processing, it must use protective gas. Air is of course a simple and economical protective gas, and the air compressor provides clean and dry compressed air. One part is combined with high-purity oxygen and high-purity nitrogen to form cutting gas and provided to the cutting head (clean compressed air - solenoid valve - cutting head), one part is used as a power gas source to supply the cylinder of the clamping table, and then one part is used to purge and remove dust from the optical path system, respectively as cutting gas, cylinder power gas source and optical path positive pressure dust removal gas to maintain the normal operation of the laser cutting machine. Therefore, the air compressor is indispensable for every laser cutting machine equipment and is also very important for the laser cutting machine.

Energy Conservation

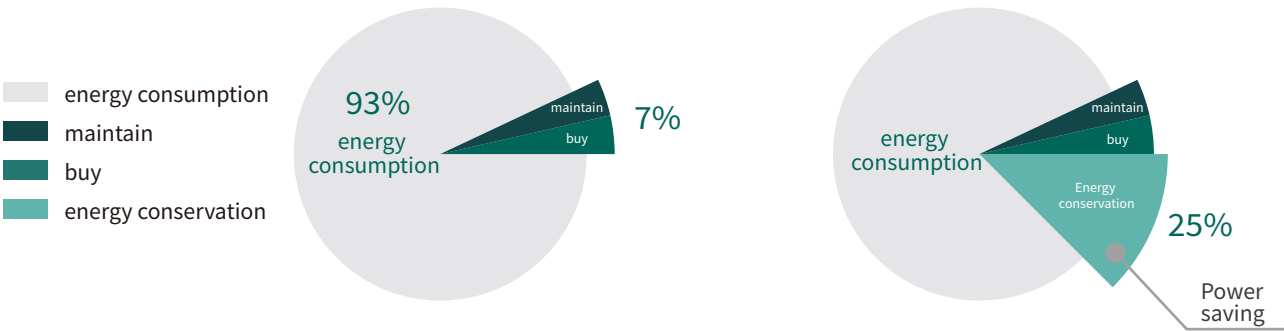
Air compressors are the "electric tigers" in industrial electricity consumption,with an average power consumption of 20%. We have made a series of efforts and research on how to use the same electricity to create more air to help users save energy,and have made important breakthroughs. The permanent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



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



intelligent control

Rust proof shell

Efficient and energy-saving

Constant current and stable voltage


Easy to use and worry free


reduce the noise




Intelligent control technology

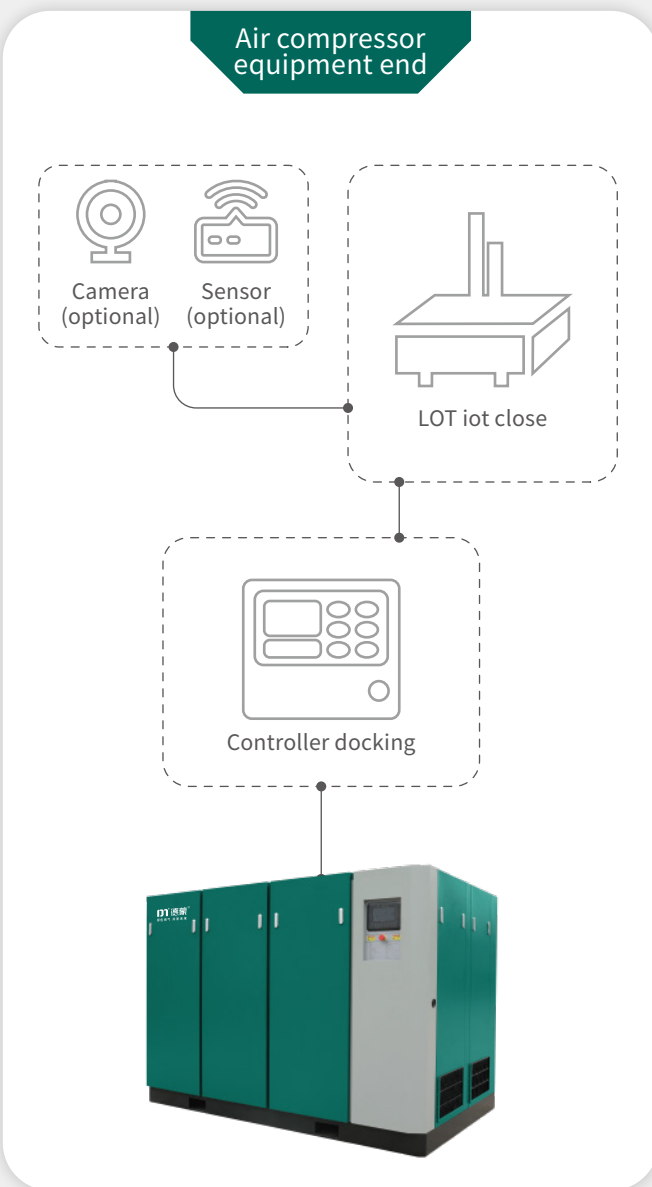
cloud intelligent control three functions and value

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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.

