

JAGUAR®

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Technology Leader of PM Screw Compressor

Top of the "Energy-efficiency Star" Ranking by MIIT for Four Consecutive Years



Since 1991
Stock Code 301028.SZ

XIAMEN EAST ASIA MACHINERY INDUSTRIAL CO., LTD.

Add: 611 Xike Street, Tong'an, Xiamen 361100, China.
Tel: +86-400-611-3080, +86-592-7113080
E-mail: foreigntrade@jaguar-compressor.com



www.jaguarcompressors.com

JAGUAR PM VSD Dry Oil-free Screw Air Compressor ZS-75~350HP

XIAMEN EAST ASIA MACHINERY INDUSTRIAL CO.,LTD.



02

Two modern factories

15%

Proportion of R&D staff

73

Patents

200⁺

High precision large-scale equipment

60000^{m²}

Storage warehouse

140000^{m²}

Overall floorage

Company profile



The company was established in 1991



Shenzhen Stock exchange GEM listed companies
stock code 301028.SZ

Xiamen East Asia Machinery industrial Co., Ltd (EAMI) is a comprehensive compressed air system solution manufacturer listed in Shenzhen Stock Exchange (stock code:301028). EAMI is a large scale enterprise which can design, research and produce positive-displacement compressor and it is one of the few companies that masters the core technology of screw air compressor. EAMI's brand "JAGUAR" occupies a leading position in the field of permanent magnet screw air compressor throughout the year. "JAGUAR" brand ranked the top of the "Energy Efficiency Star" evaluated by Ministry of industry and information technology of China for four consecutive years, 2018, 2019, 2020 and 2021.

Since its establishment in 1991, EAMI has more than 70 patents, more than 80 kinds of screw rotor profile. Company's whole series of permanent screw air compressor exceed the grade one of national level of energy efficiency and mostly, maintain the world's leading level of energy efficiency in two stage compression series. With strong research and development capability, well-qualified professional team, advanced testing equipment and scientific management system, more than 800 JAGUAR distribution and service teams, EAMI provides not only excellent complete set of compressed air system solution but also full range of professional and attentive service to all customers in the world!

R&D force

As a high-tech enterprise, EAMI has strong research and development ability. In the past 30 years, EAMI has focused on deepening product reform and promoting enterprise technological innovation. The company holds 73 patents for invention, utility model, appearance and has independently developed more than 60 JAGUAR screw rotor profile lines. In addition, the company has established cooperative relations with a number of colleges and universities, making full use of the talents and technological advantages of them, and establishing a technological innovation system with enterprises as the main body and a combination of industry, university and research. Provide strong scientific and technological support for the sustainable development of the company.

High quality R&D team

- Overseas research and development center and provincial enterprise technology center
- Member of National Compressor Standardization Technical Committee
- "Vice President Unit" of China High Efficiency and Energy Saving Equipment Industry Development Alliance
- Compressor branch member of China General Machinery Industry Association
- R&D technicians account for 15% of the total staff

Advanced manufacturing equipment

The main equipment are British HOLROYD CNC Grinding Machine, Italian SALVAGNINI Fully Automatic Bending Machine, German DMG MORI CNC Horizontal Machining Center and TRUMPF Laser Cutting Machine. High precision industrial machine guarantee that the product and product parts size tolerance, form tolerance meet the design requirements and all parts can be exchanged, meet the assembly line mass production requirement.

Strong R&D capability

- The company holds 73 patents for invention, utility model and appearance, and has independently developed more than 60 JAGUAR screw rotor profile lines, covers from 0.5 to 80 cubic meters.
- Participated in drafting industry standards such as "Requirements for Name Plates, Manuals and Brochures of Rotary Air Compressors for General Use" and "Energy Saving Design Guide for Compressed Air Stations".
- From air-end profile design to processing, inspection, assembly, completely independent research, development and production, truly master the core technology.

Professional testing standards

The introduced German ZEISS three-coordinate measuring instrument has strict quality control standard. Every part has to pass strict inspection, which can be passed to the next process. At the same time, it serves as the data source for the improvement of research and the basis for product design.

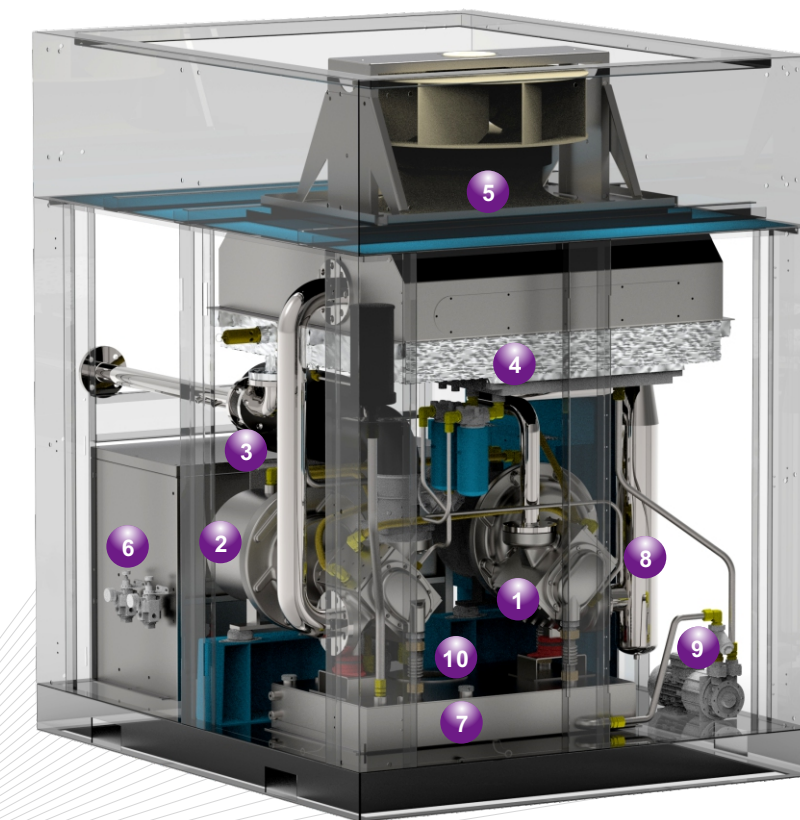
JAGUAR PM VSD Dry Oil-free Screw Air Compressor

JAGUAR Oil-free Screw Air Compressor use two-stage compression, permanent magnet frequency conversion configuration, the air-end and the whole machine were completely independent researched and developed. The main engine uses reliable multistage sealing shaft sealing system, so that no lubricating oil is involved in the whole process of air compression, and the output of compressed air is pure and oil-free. The unique sound insulation design of air inlet and soundproof design of box board reduces the machine noise to a minimum. It is especially suitable for medical, pharmaceutical, food, petrochemical, electronics, national defense scientific research and other industries that need high quality oil-free compressed air.

CLASS 0
Oil free
certification



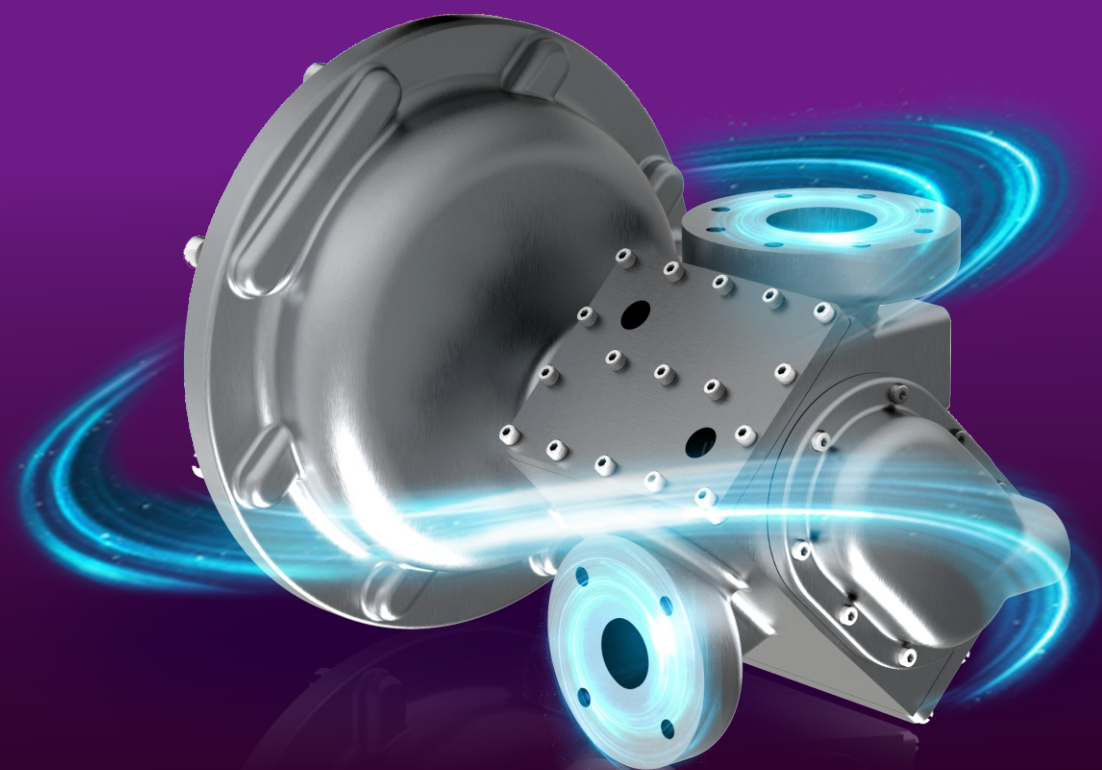
JAGUAR PM VSD Dry Oil-free Screw Air Compressor Structure



- 1 Screw Air-end
- 2 Permanent Magnet Motor
- 3 Air Filter
- 4 Cooling System
- 5 Centrifugal Fan
- 6 Air inlet noise reduction system of the whole machine
- 7 Integrated lubricating oil+ Cooling water tank
- 8 Intermediate cooling water remover
- 9 Lubricating oil pump
- 10 Cooling water pump

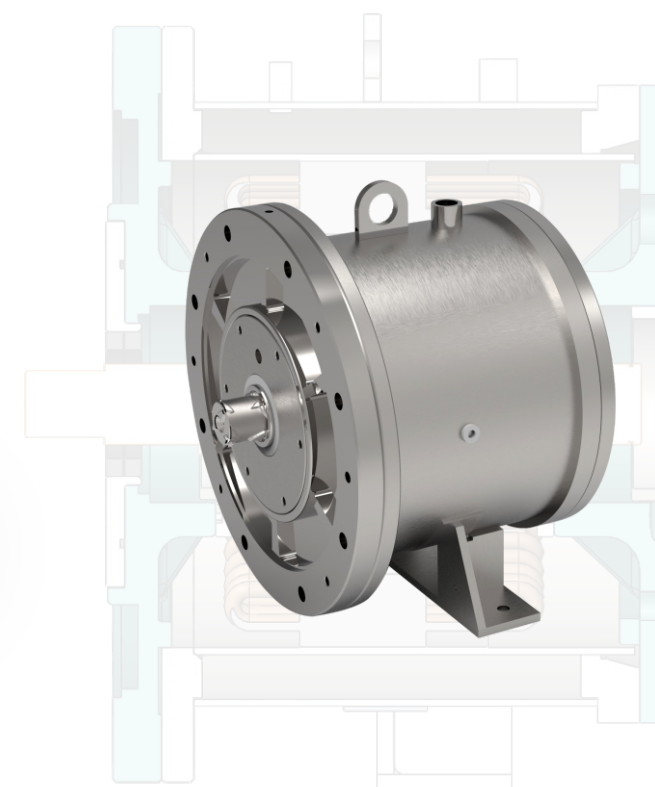
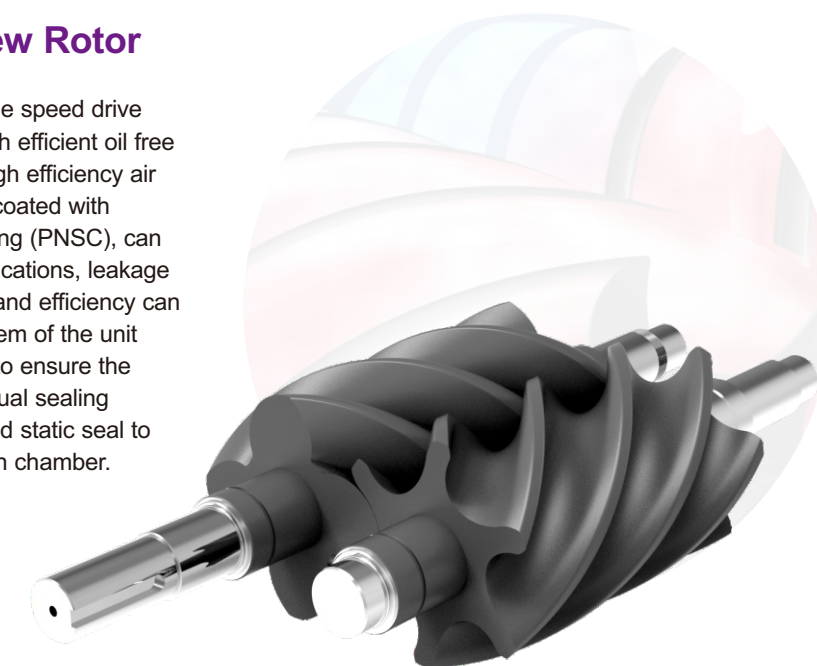
JAGUAR Screw Air-end

The air-end is completely developed by JAGUAR, unique appearance and interior structure. Front and rear bearings use labyrinth seal + carbon ring seal + gas seal three-level seal form, so that the compression chamber and lubricating oil are completely isolated, no lubricating oil is involved in the air compression process, to ensure the output of compressed air pure oil-free. The unique water jacket inside the main body is designed to control the temperature of the body well through the circulation of cooling water, so that the gap between the components inside the main body is always controlled in the ideal range, and the exhaust temperature is effectively reduced. The screw rotor is made of stainless steel and sprayed with super coating on the surface. The special coating material has amazing adhesion, wear resistance and corrosion resistance, which can protect the rotor well in the operating environment of high temperature and high humidity inside the main engine. Proper coating thickness makes the clearance between the Yin and Yang screw rotors, between the rotor and the shell in the best control, reduce leakage, and thus ensure the efficiency of the main engine.



JAGUAR Coated Screw Rotor

JAGUAR permanent magnet variable speed drive screw air compressor, combined with efficient oil free screw rotor profile lines, provides high efficiency air production. The rotor and shell are coated with Polymer Nano Self-lubricating Coating (PNSC), can meet a variety of high humidity applications, leakage can be reduced to a greater extent and efficiency can be improved. The transmission system of the unit uses forced lubrication and cooling to ensure the reliability of the system operation. Dual sealing system includes mechanical seal and static seal to ensure the pure oil-free compression chamber.

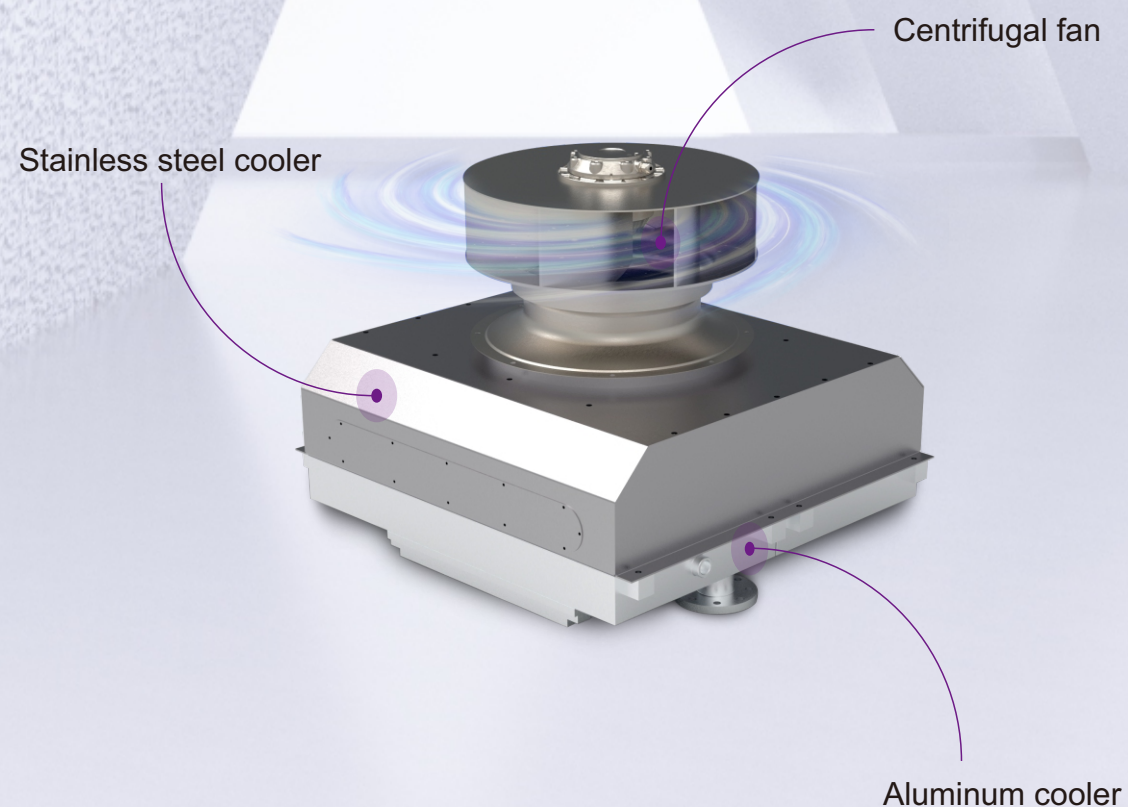


JAGUAR Motor

Use (IPM) IE4 permanent magnet variable speed drive motor, high efficiency and energy-saving. JAGUAR unique fully sealed liquid cooling design, protection level up to IP65. Liquid cooling system controls the motor temperature within the ideal range, to ensure that the motor never lose magnetic and improve the motor efficiency. Use SKF fully sealed self-lubricating bearing, the motor is maintenance-free within the bearing life cycle.

JAGUAR Cooling System

The cooling system uses the integrated design of lubricating oil cooling, cooling water cooling, middle cooling and rear cooling, which ensures the cooling effect of each system while reducing space and compacting structure. The secondary cooling mode of stainless steel cooler and aluminum cooler is used for the middle cooling and the rear cooling respectively. The high temperature compressed air discharged from the air-end is pre-cooled by the stainless steel cooler before entering the aluminum cooler to ensure the safe and reliable work of the aluminum cooler at an acceptable temperature. With low speed, low noise, high wind pressure centrifugal fan, make the whole system in a reasonable temperature range, improve the reliability of the machine.



JAGUAR lubricating oil system

Oil tank



The oil tank is integrated with the cooling water tank, and the internal partition is designed to help the lubricating oil returning to the oil tank to better separate the air contained in it, avoid the oil pump cavitation, and reduce the liquid level fluctuation caused by the impact of the oil return.

Oil pump



The magnetic pump, the pump body is made of stainless steel, can work in the medium -60°C to $+350^{\circ}\text{C}$ temperature range, low noise, small vibration, magnetic force driven between the pump body and the motor, the pump body has no dynamic sealing components, stable sealing performance, zero leakage.

Oil mist separator



The oil mist separator is installed on the oil tank, so that the inside of the oil tank is communicated with the atmosphere, to ensure that the oil return is smooth, and to effectively intercept the overflowed oil mist from the oil tank, to prevent the oil mist from entering the box and being inhaled by the main engine and affecting the quality of the compressed air.

Circulating water pump



Immersion multistage centrifugal pump, zero external leakage, high reliability, excellent anti-cavitation performance, low noise, efficient and stable.

JAGUAR self-developed intelligent control system

- Optimize PID, new control logic, the speed ratio of primary and secondary motors is flexible and adjustable, and the most energy-saving ratio can be adjusted according to different working conditions.
- Upgraded control accuracy, pressure accuracy increased to 0.001MPa.
- Automatic frequency conversion according to the actual use of customer pressure, energy saving and high efficiency.
- Scheduled start and stop, scheduled pressure.
- Multi-channel temperature and pressure sensors comprehensively monitor the safe operation of the whole air compressor.



Internet of Things function

With the function of Internet of Things, customers can remotely check the operating pressure of air compressor and whether it is faulty by using mobile phones and PCS, and remotely turn the whole air compressor on and off in real time.



Application industry

JAGUAR permanent magnet dry oil-free screw machine is mainly used in medical, pharmaceutical, food, petrochemical, electronics, semiconductor, printing, precision spraying, national defense research and other industries that need high quality compressed air.



Technical Data Sheet

Model	Discharging Pressure (Mpa)	Discharging Volume (m³/min)	Power (KW)	Type of Cooling	Weight Kg	Overall Dimensions (L×W×Hmm)
ZS-75	0.8	8.2	55	air-cooling	2580	2125x1725x2200
	1.0	7.5				
ZS-100	0.8	11.5	75	air-cooling	2680	2125x1725x2200
	1.0	10.8				
ZS-125	0.8	14	90	water-cooling	3140	2825x2175x1800
	1.0	12.9				
ZS-150	0.8	18.1	110	water-cooling	3760	2825x2175x1800
	1.0	16.8				
ZS-175	0.8	20.4	132	water-cooling	5000	3129x2229x1800
	1.0	18.8				
ZS-200	0.8	26.2	160	water-cooling	5800	3129x2229x1800
	1.0	24				
ZS-250	0.8	29.1	185	water-cooling	6300	3129x2229x2000
	1.0	27.5				
ZS-300	0.8	35.6	220	water-cooling	6800	3129x2229x2000
	1.0	32.4				
ZS-350	0.8	40.5	250	water-cooling	7300	3129x2229x2000
	1.0	36.8				

Specification Subject To Change Without Notice In Advance.



Joint control function

When the air compressor station has multiple air compressors, the air compressor can be connected to the central control system for centralized control of the air compressor station. In case of malfunction, the standby machine can be automatically started and adjusted flexibly according to the user's working condition.