

# Jiapeng WWY-45~55/4-150 Type Oil Free High Pressure Booster Air Compressor

## **Basic Information**

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity:
- Price:

Our Product Introduction

- Packaging Details:
- Delivery Time:
- Payment Terms:

## Anshan Jiapeng CE ISO9001

China

- WWY-45~55/4-150 1

- Supply Ability:

### \$2000~20000 per set Wooden Case With in 7 days D/P, T/T, L/C, L/C, D/A, D/P, T/T, Western Union, MoneyGram

500 Sets Per Year



### **Product Specification**

<ul> <li>Highlight:</li> </ul>		15 Mpa oil free booster compressor, 0.4 Mpa High Pressure Booster Air Compressor, 580 r/min High Pressure Booster Air
Application:		O2, N2, Ar2
• REV R/min:		580
<ul> <li>Weight:</li> </ul>		520 Kg
• Size:		1450*1100*1250 (mm)
Outlet Size:		G5/8
<ul> <li>Inlet Size:</li> </ul>		Rc1
Cylinder Diameter:		2-Ф70+Ф50+Ф30 (3 Stages)
Flow Rate Nm3/h:		45
OutLet Pressure:		15 Mpa
Input Pressure:		0.4 Mpa

Compressor

#### **Product Description**

JIAPENG WWY-45~55/4-150 TYPE oIL FREE Oxygen Booster Supercharger Air compressor O2 High booster for Oxygen filling

About shanghai powerbuilder automation technology co., ltd

We are the authorized distributor of Anshan Jiapeng. We have been engaged in the assembly of PSA nitrogen generators and oxygen generators in our factory for 15 years, providing approximately 400 sets of PSA nitrogen generators and oxygen generators for domestic and international customers each year, including production, and debugging.

In collaboration with Burkert Valves, we have customized our own double-acting pneumatic valve. Through the design of top and middle pressure equalization, and airflow orifice plates, we continuously optimize and reduce the air consumption ratio of the equipment, thus achieving energy savings. The energy consumption ratio of our equipment has reached the highest level in China. And through our patented silencer, our device noise is controlled to less than 55 db.

In terms of process flow, we have cutting, welding, assembly, filling of molecular sieves, automatic rust removal, spraying, and complete procedures and supporting equipment for commissioning.

In the supply chain aspect, we provide first-line brands such as Atlas Copco, Ingersoll Rand, GDK, Liutech, Bolaite, Hanbell, and BK for air compressors, and provide Boly, Atlas Copco, and Liutech refrigerated dryers, as well as Anshan Jiapeng and Anging Bailian boosters. We can provide supporting equipment and accessories.

Currently, our company's products are aimed at end-users and distributors worldwide. We provide customized remote systems, color customization, display interface customization, and many other OEM services. And we also provide ASME standard equipment and pressure tanks for USA and Australian market.

For specific selection, please contact our customer manager. We hope to become your trusted long-term partner. About Anshan Jiapeng Compressor Co., Ltd

Anshan Jiapeng Compressor Co., Ltd. is located in the southeast of Liaoning Province, located in the steel capital - Anshan, the company was established in June 1998, the registered capital of 5 million yuan, after the reform of the state-owned enterprises, the first production of oil-free gas compressor joint-stock companies, is the earliest domestic production license manufacturers. The company mainly produces 10 series of compressors with more than 100 models of oil-free air, oxygen, nitrogen, argon, helium, carbon dioxide, sulfur hexafluoride and other non-flammable and explosive gases. At the same time, supporting post-treatment equipment, cold and dry machines, filters, gas storage tanks, to provide users with oil-free, water-free, dust-free and sterile purified air. Fat-filling oil-free compressor can change the original old model structure, convenient maintenance, prolong the service life, has won the national patent (patent no. ZL 20112 0053943.2) is the first compressor production license and general machinery GC certification unit, and through the ISO9001-2008 system certification. National quality qualified products. National mechanical and electrical products energy efficiency grade certification, for many years by anshan Industrial and commercial bureau as industry and commerce exempt enterprises, abide by the contract heavy credit enterprise, Anshan technical supervision bureau "anti-

# Jiapeng booster advantages

1. Chinese and English operation interface(pic1)

2. With abnormal alarm reminder function(pic2)

3. The filling booster is equipped with a water tank and a water pump. After 40 liters of water is added to water tank , the booster can work when the power is turned on. There is no need for a extra water tank and pump!



#### Working Principle

counterfeiting and fidelity enterprise".

Compression of gas: The air compressor draws in a large volume of air through one or more cylinders and compresses it using a piston or a screw-type compression device. As the gas is compressed, the molecular spacing decreases, resulting in increased gas pressure and temperature.

Discharge of high-pressure gas: After compression, the high-pressure gas is pushed into the air compressor's storage tank or delivery pipelines. The storage tank is used to store the compressed air and balance the supply of air from the compressor.

Control System: Air compressors are equipped with a precision control system that oversees and manages the gas pressure to ensure optimal performance and safety.

The control system is responsible for monitoring the gas pressure within the compressor. It constantly measures the pressure levels using sensors or pressure transducers and compares them to the preset values. If the pressure drops below the desired setpoint, the control system initiates the compressor to start, increasing the gas supply and restoring the pressure to the target range.

Conversely, when the pressure reaches the upper limit set by the control system, it takes appropriate action to either stop or reduce the operation of the compressor. This prevents over-pressurization and safeguards the equipment from potential damage or failure.

The control system utilizes advanced algorithms and feedback mechanisms to ensure precise and responsive pressure regulation. It continuously adjusts the compressor's output based on the real-time pressure readings, maintaining a stable and consistent supply of compressed air.

Furthermore, the control system may incorporate additional safety features such as pressure relief valves or unloaders. These mechanisms activate in case of sudden pressure surges or emergencies, providing an extra layer of protection for the compressor and the surrounding equipment.

By effectively managing the gas pressure, the control system optimizes the compressor's performance, enhances energy efficiency, and extends the equipment's lifespan. It provides reliable and automated control, allowing for seamless operation of pneumatic systems while ensuring the safety and reliability of the overall system.

In summary, the control system in an air compressor is responsible for monitoring and regulating the gas pressure, ensuring consistent and safe operation. It employs advanced algorithms, feedback mechanisms, and safety features to maintain optimal pressure levels, promoting efficiency and reliability in compressed air applications.

Cooling system: During the compression process, the temperature of the gas increases. Therefore, air compressors are usually equipped with a cooling system to lower the gas temperature. This can be achieved through air cooling or water cooling.

Lubrication system: To reduce friction and wear, air compressors typically require a lubrication system to provide lubricating oil or lubricants to the compression device and other moving parts.

In summary, an air compressor compresses a large volume of air into high-pressure gas to meet the compressed air requirements in various industrial and commercial applications. The key steps in the working principle include gas compression, discharge of high-pressure gas, control system, cooling system, and lubrication system.

#### **Product description**

Lot.	Item		Parameter
1	The compression medium		Oxygen (must be dry and free of particulate gas)
2	Model		SWY-45~55 /4150
3	Flow rate (standard) Nm <sup>3</sup> /h		45~55
4	Inlet temperature		≤40
5	Inlet pressure MPa		0.4
6	Outlet Pressure MPa		15
7	Cylinder diameter quantity		2-Φ70+φ50+φ30mm
8	Revolving Speed r/min		580
9	Cooling Mode		Air cooling + water cooling (in circulation)
10	Lubrication method		Oil free lubrication
11	Compressed series		Three Level
12	Structural style		Angle type, W type, single unit
13	Motor	Power kW	18.5
		The electric system	AC380V, three-phase electricity, 50Hz,
		Insulation grade	B Grade
		Protection grade	IP44
		Start Mode	Direct Starting
14	Drive Mode		Belt Drive
15	The installation type		The base type
16	Noise Figure dB(A)		≤80
17	Control mode		PLC Touch screen control: maintenance alarm over temperature alarm, overpressure alarm, motor overload alarm and so on
18	Dimension of inlet and outlet		Rc1 Rc5/8
19	Size(L×W×H) mm		1450*1100*1250
20	Weight kg		≈520

#### The basic parameters listed in this table can be confirmed according to the actual working conditions Touch display PLC control

Remote control is optional

Inlet and outlet pressure overload, temperature overheating, cooling water failure,circulation rolling alarm and stop Operation time display, maintenance cycle prompt

With water tank and circulating pump without external pipeline, filling antifreeze at low temperature without obstruction.



