China

# Jiapeng Nitrogen Booster Compressor SWY-90~110/4-150 Oil Free

## **Basic Information**

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity:
- Price:
- Packaging Details:
- Delivery Time:
- Payment Terms:
- Supply Ability:

	Anshan Jiapeng
	CE ISO9001
	SWY-90~110/4-150
ity:	1
	\$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>Input Pressure:</li> </ul>	0.4 Mpa
OutLet Pressure:	15 Mpa
• Flow Rate Nm3/h:	90
Cylinder Diameter:	2-Φ70+φ50+φ30)*2
<ul> <li>Inlet Size:</li> </ul>	Rc1
Outlet Size:	G5/8
• Size:	2900*1320*1300 (mm)
• Weight:	1260kg
• REV R/min:	580
<ul> <li>Application:</li> </ul>	O2, N2, Ar2
<ul> <li>Highlight:</li> </ul>	15mpa nitrogen booster compressor, 0.4mpa nitrogen booster compressor, 580 r/min oil free booster compressor

JIAPENG SWY-90~110/4-150 olL FREE Oxygen Booster Supercharger Air compressor O2 High booster for Oxygen filling

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 Anqing 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-counterfeiting and fidelity enterprise".

# 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**

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 typically equipped with a control system to monitor and regulate the gas pressure. When the pressure drops below a set value, the control system starts the compressor to increase the gas supply. When the pressure reaches the preset upper limit, the control system stops or reduces the operation of the compressor.

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, the working principle of an air compressor revolves around meeting the demand for compressed air in diverse industrial and commercial settings. It involves several key steps to ensure efficient operation and reliable performance. The first step is gas compression, where the air compressor takes in a substantial volume of air and compresses it into high-pressure gas. This compression process reduces the molecular spacing, resulting in increased pressure and temperature. Next, the high-pressure gas is discharged either into a storage tank or delivered through pipelines. The storage tank serves as a reservoir to store the compressed air, providing a balanced supply for various applications.

To maintain optimal performance, air compressors are equipped with a control system. This system continuously monitors and regulates the gas pressure. If the pressure falls below a predetermined level, the control system activates the compressor to increase the gas supply. Conversely, when the pressure reaches the upper limit, the control system stops or reduces the compressor's operation to maintain the desired pressure range.

During the compression process, the temperature of the gas tends to rise. To counteract this, air compressors utilize cooling systems. These systems employ either air cooling or water cooling methods to dissipate excess heat, ensuring that the gas

remains at a suitable temperature for efficient operation.

Finally, to reduce friction and enhance durability, air compressors incorporate lubrication systems. These systems deliver lubricating oil or lubricants to the compression device and other moving parts. By minimizing friction and wear, the lubrication system promotes smooth operation and prolongs the lifespan of the equipment.

By following these steps, air compressors play a crucial role in meeting the demand for compressed air, enabling a wide range of industrial and commercial applications to operate efficiently and effectively.

#### Product description

Lot.	Item		Parameter
1	The co	mpression medium	Oxygen (must be dry and free of particulate gas)
2	Model		SWY-90~110 /4-150 -
3	Flow rate (standard) Nm <sup>3</sup> /h		-90~110
4	Inlet te	mperature	≤40
5	Inlet pressure MPa		0.4
6	Outlet Pressure MPa		15
7	Cylinder diameter quantity		(2-Φ70+φ50+φ30mm**2
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
	Motor	Power kW	37
		The electric system	AC380V, three-phase electricity, 50Hz,
13		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	Contro	l mode	PLC Touch screen control: maintenance alarm over temperature alarm, overpressure alarm, motor overload alarm and so on
18	Dimen	sion of inlet and outlet	Rc1 Rc5/8
19	Size(L:	×W×H) mm	2900*1320*1300
20	Weight	t <b>kg</b>	≈1260
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### 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.

