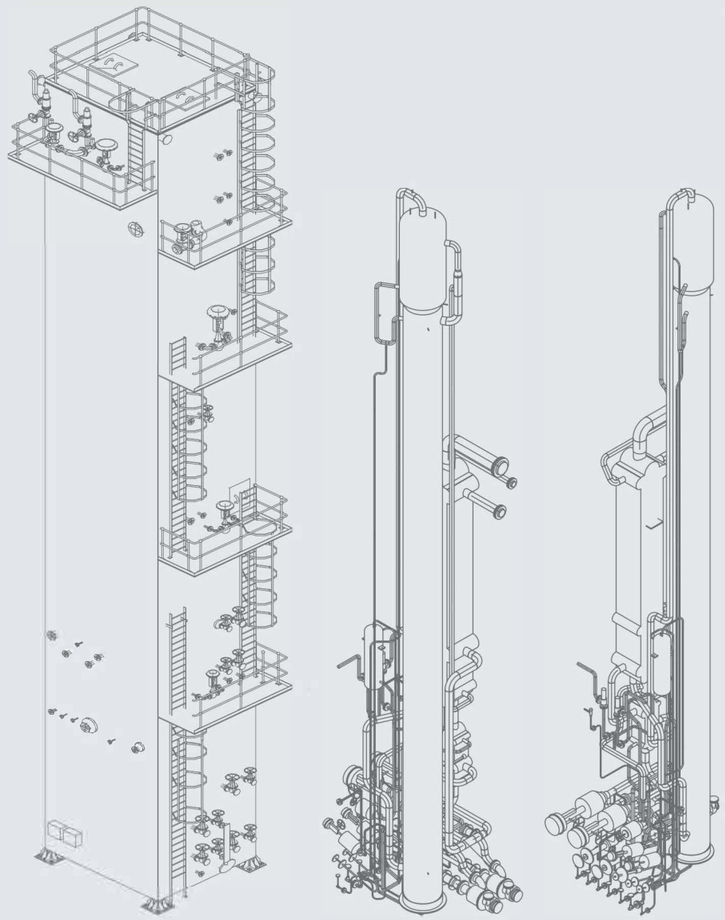
NUZHUO

RAJA ANGIN INDONESIA

www.hznuzhuo.com

NU ZHUO

Oxygen and nitrogen air separtion unit
Intelligent control valve
All oil free gas compressor



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RAJA ANGIN INDONESIA

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ENTERPRISE PROFILES

Hangzhou Nuzhuo Technology Group Co., Ltd. is located in Hangzhou,China. The transportation is convenient, where near Hangxinjing High-speed Expressway, Hangzhou Xiaoshan International Airport, Shanghai Pudong Airport.

NUZHUO Group was established in 1998, based on the air separation industry for more than 20 years, our company has more than 14,000 square meters of modern standard workshops and 1500 square meters of sales headquarters. Our company always adheres to the business philosophy of "integrity, cooperation, and win-win", takes the development path of technology, diversification, scale, and develops toward high-tech industrialization. Our company has passed the ISO9001 quality system certification, CE certificate, and won the "contract-honoring and trustworthy Unit" and the company are listed as the key enterprise of technological innovation in Zhejiang Province's high-tech industry.

NUZHUO Group has three subsidiaries: Hangzhou Kaihe Air Separation Equipment Co., Ltd., Hangzhou Azbel Technology Co., Ltd., and Guodi Technology (Hangzhou) Co., Ltd., We are specialized in the design and manufacture of cryogenic air separation units, VPSA oxygen generator, compressed air purification equipment, PSA nitrogen generator, PSA oxygen generator, oil-free gas booster compressor, electric and pneumatic intelligent control valves, with a total of more than 800 specifications and models manufacturer. The product structure is matched up and down, one-stop service.

The company's products use "NUZHUO" as the registered trademark and are widely used in metallurgy and coal, power electronics, petrochemical, biomedicine, tire rubber, textile and chemical fiber, food preservation and other industries. The products play an important role in many key national projects. More and more countries where the products have been exported, such as, Saudi Arabia, United Arab Emirates, Egypt, Iran, Iraq, Syria, Russia, Philippines, Vietnam, Malaysia, Thailand, Myanmar, Pakistan, North Korea, India, Bhutan, Turkey, Ghana, Uzbekistan, Chile, Peru, Kazakhstan, Kenya, Germany, United States, Brazil, New Zealand, Mozambique, Lebanon, Mongolia, Nigeria, South Africa, etc,. So far, NUZHUO has cooperated with companies from domestic market and all over the world with excellent product reputation.

NUZHUO Group takes the needs of users as the appeal point, the development of the society as the goal, and the satisfaction of users as the standard. Our company's tenet is: "Survive by quality, market-oriented, technology for development, management to create benefits, and service to gain credibility". Strive to be in line with international standards in terms of quality, service, management, and technology. With "NUZHUO" products, provide users with clean, high-purity gas energy and create benefits, and jointly create a better tomorrow.

ENTERPRISE CHARACTER

ENTERPRISE GLORY






WORKSHOP SHOW





ENTERPRISE CULTURE

ENTERPRISE GOAL

- Aim at building a global independent brand, and pushing cryogenic air separation and control valves to the international market
- Grow a foreign trade team talents to enter the international market, as well as outstanding leaders
- Research and develop high–performance mechanical products with higher technical content, environmental protection, safety, energy saving, efficiency increase
- Independent research and development, independent creation and independent production by the key investment technical engineer department
- Overall plan, rationally rectify the production line of the workshop, realize efficient production and quality assurance

ENTERPRISE PRINCPLE

Based on what are customers desire, technology research and development as the core, integrity management, customer willingness as the foundation, and the principle of achieving a win–win situation for both parties and long–term cooperation

ENTERPRISE CERTIFICATE

DIRECTORY

CRYOGENIC AIR SEPARATION SERIES

WORKING PRINCPLE

The basic principle of air separation is use cryogenic rectification to condense air into liquid and separate the air according to the evaporation temperature of each component. The two–stage rectification tower simultaneously obtains pure nitrogen and pure oxygen at the top and bottom of the upper tower. It is also possible to take out liquid oxygen and liquid nitrogen from the evaporation side and the condensation side of the main cooling respectively. The air separation in the rectification tower is divided into two stages, air is separated for the first time in the lower tower to obtain liquid nitrogen and at the same time obtain oxygen–enriched liquid air. The oxygen–enriched liquid air is sent to the upper tower for rectification to obtain pure oxygen and pure nitrogen. The upper tower is divided into two sections: with the liquid–air inlet as the boundary, the upper part is the rectification section, which rectifies the rising gas, recovers the oxygen component, and purifies the nitrogen purity, and the lower section is the stripping section to remove the nitrogen components in the liquid, separated to improve the oxygen purity of the liquid.

PROCESS FLOW

- Air Compressor, Air be compressed to 0.5–1.3Mpa by air compressor
- Air Pre–cooling, The air is pre–cooled to 5–10℃, in the pre–cooling unit, and the moisture is separated.
- Air Purification System, Removing the remained moisture, carbon dioxide and hydrocarbons of compressed air in the molecular sieve purifier;
- Turbo Expansion, The air expands and cools in the turbo expander and provides the cooling capacity required by the device
- Heat Exchange, The air exchanges heat with the refluxing oxygen, nitrogen, and dirty nitrogen in the heat exchanger of the fractionation tower, and is cooled close to the liquefaction temperature, and the refluxed oxygen, nitrogen, and dirty nitrogen are repeatedly heat exchanged to the ambient temperature.
- Cooling, Cooling the liquid air and liquid nitrogen before the throttling of the nitrogen in the chiller.
- Rectification, The air is rectified and separated in the rectification tower, and the product nitrogen is obtained at the top of the upper tower, and the product oxygen is obtained at the bottom of the upper tower.

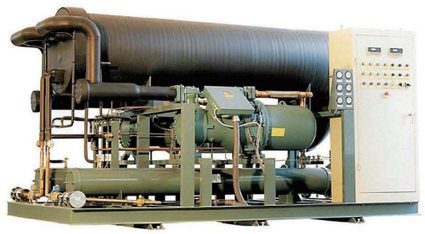
DEVICE CONFIGURATION

Air Compression System:

1.Screw Type Lubricate Oil Air Compressor;
2.Screw Type Oil Free Air Compressor;
Brand: Atlas Copco, Sullair, Azebl Compressor
3.Centrifugal Air Compressor with Raw Air Filters Brand: Atlas Copco, IHI-Sullair, Ingersoll Rand,Turbo-Tech...

Pre–cooling System:

The original imported screw refrigeration compressor and the air–conditioning unit combined with all imported refrigeration components are equipped with a water separator, manual and imported automatic drains to drain water regularly



Air Purification System:

The purifier adopts a vertical single–layer bed with simple and reliable structure and low resistance loss, built–in filter, blowing off and purifier regeneration at the same time, high–efficiency electric heater ensures complete regeneration of molecular sieve

Turbo Expander System:

The turbo expander adopts gas bearing and oil bearing turbo expansion unit, which is simple and reliable, high efficiency.
Most parts of cold device needed are supplied by turbo-expansion system, cooperated with heat exchanger and valve system.

Fractionating Column System (Cold Box):

The heating, cooling, liquid accumulation and purification of the fractionating tower can be completed in one way, and the operation is simple, quick and easy. Adopt aluminum plate–fin heat exchanger, aluminum convection sieve plate tower, the entire fractionating tower equipment pipeline adopts argon arc welding, the tower body and main pipeline in the cold box are made of high–strength aluminum alloy or stainless steel to increase the strength, Reduce the torsion damage of the pipeline. The equipment brackets, pipes and valve brackets in the cold box shall be made of stainless steel or aluminum alloy. The cold box is insulated with pearl sand and slag wool to ensure that the loss of cold capacity is minimized. The cold box structure guarantees the overall strength and the requirements of anti–seismic and wind resistance, and guarantees the load–bearing capacity of the cold box. When the cold box is running, it is equipped with airtight protection and safety devices. The main equipment in the cold box is equipped with electrostatic grounding. The cold valve and pipeline in the cold box all connections are welded, and flange connections are avoided.

O_2, N_2, Ar Booster and Filling System:

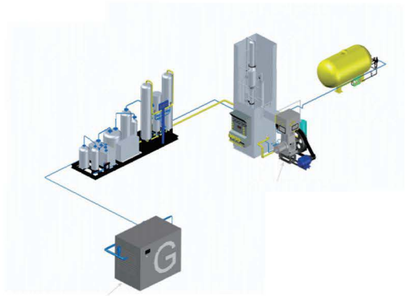
Single gas production, Internal compression process (Cryogenic liquid pump, High pressure vaporizer, Filling manifold)
Multi–gas production, External compression process (Oxygen & nitrogen & argon booster, Filling manifold)

Instrument and Electric Control System:

Siemens imported brand, Fully automatic production system, Digital control system
Equipment layout drawing(according to civil engineering design), Process pipe design drawings, Instrument electrical design drawings, etc.

NZDN High Purity Nitrogen Air Separation Unit

High–purity nitrogen equipment can adopt forward flow and reverse flow, single–tower, double–tower and other process organization methods to meet the requirements of different pressure levels of customers. The whole device can be controlled by DCS or PLC system.

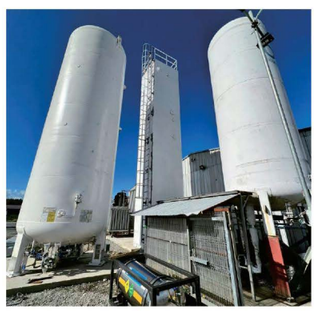


TECHNICAL INDICATORS

High Purity Nitrogen Equipment（NZDN）			
Nitrogen Purity	≥99.9997%	Raw Material Medium	Air
Phase State	Gas Phase	Temperature State	Normal Temperature
Operation Cycle	≥24 Months	Start Time	~ 12 Hours

SPECIFICATIONS CLASSIFICATION

Model	Unit	NZDN -200	NZDN -300	NZDN -400	NZDN -700	NZDN -1000	NZDN -1600	NZDN -3000
Nitrogen Production	Nm^3/h	200	300	400	700	1000	1600	3000
Liquid Nitrogen Production	L/H	/	10	10	20	40	60	150
Nitrogen Purity	$PPmO_2$	≦3	≦3	≦3	≦3	≦3	≦3	≦3
Nitrogen Pressure	MPa.A	0.34~1	0.34~1	0.34~1	0.34~1	0.34~1	0.34~1	0.34~1
Device Occupied Area	m^2	95	150	220	260	300	320	410



NZDO Cryogenic Oxygen Air Separation Unit

The cryogenic oxygen production & oxygen&nitrogen production process introduces a low–pressure process into the air separation equipment, which reduces the energy consumption of the air separation and improves the safety of operation. Corresponding chemical software is used in process calculation and unit equipment design for process distillation calculation and structure calculation to ensure advanced and reliable equipment.

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The company designed and developed a skid–mounted purification system to minimize on–site piping installation time

TECHNICAL INDICATORS

Cryogenic Oxygen Air Separation Unit（NZDO）			
Name	Oxygen Gas	Pressure	20MpaG（Adjustable）
Purity	≥99.6%	Operation Cycle	12 Months
Start Time	~ 24 Hours	Single Column, Internal compression Process	

Cryogenic Oxygen&Nitrogen Air Separation Unit（NZDON）			
Name	Oxygen&Nitrogen Gas	Pressure	20MpaG(Adjustable)
Oxygen Purity	≥99.6%O_2	Nitrogen Purity	≥99.99%
Start Pressure	1.0MPaG	Double column, External compression Process	

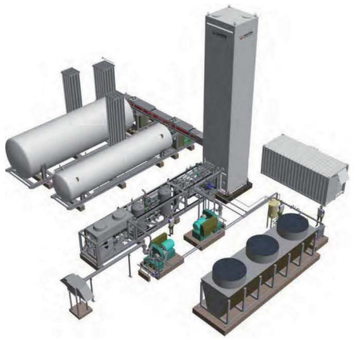
SPECIFICATIONS CLASSIFICATION

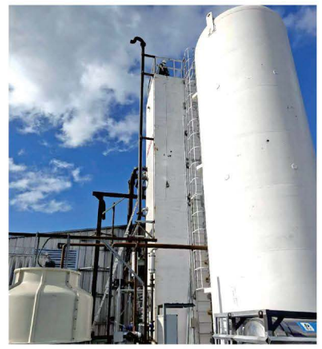
Model	Unit	NZDON -50-50	NZDON -80/160	NZDON -180-300	NZDON -260-500	NZDON -350-700	NZDON -550-1000	NZDON -750-1500	NZDONAR-1200-3000-30Y
Oxygen Production	Nm^3/h	50	80	180	260	350	550	750	1200
Oxygen purity	$\%O_2$	≧99.6	≧99.6	≧99.6	≧99.6	≧99.6	≧99.6	≧99.6	≧99.6
Nitrogen Production	Nm^3/h	50	160	300	500	700	1000	1500	2000
Nitrogen Purity	$PPmO_2$	≦10	≦10	≦10	≦10	≦10	≦10	≦10	≦5
Liquid Argon Production	Nm^3/h	—	—	—	—	—	—	—	30
Liquid Argon Purity	$PpmO_2$+ $PPmN_2$	—	—	—	—	—	—	—	≦1.5$PpmO_2$ +4$PPmN_2$
Liquid Argon Pressure	MPa.A	—	—	—	—	—	—	—	0.2
Unit Consumption	Kwh/ Nm^3O_2	≦1.3	≦0.85	≦0.68	≦0.68	≦0.65	≦0.65	≦0.63	≦0.55
Device Occupied Area	m^2	145	150	160	180	250	420	450	800

NZDONAr-Y Cryogenic Liquid Air Separation Unit

Liquid air separation equipment requires more cooling capacity than gas air separation equipment.

According to the different production of liquid air separation equipment, we adopt a variety of different refrigeration cycle processes, turbine expander refrigeration, low temperature pre–cooling refrigeration, circulating compressor high and low pressure expander refrigeration, etc., through various methods to achieve reduction Energy consumption goals. The control system adopts DCS or PLC control system, and auxiliary field instruments, so that the whole set of equipment is simple to operate, stable and reliable.





SPECIFICATIONS CLASSIFICATION

Model	Unit	NZDO -180y	NZDO -250y	NZDO -400y	NZDON-1200y/300y	NZDONAR -1300y/200y/40y	NZDONAR -2700y/300y/90y
Liquid Oxygen Production	Nm^3/h	180	250	400	1200	1300	2700
Liquid Oxygen Purity	$\%O_2$	≧99.6	≧99.6	≧99.6	≧99.6	≧99.6	≧99.6
Liquid Oxygen Pressure	MPa.A	0.2	0.2	0.2	0.2	0.2	0.2
Liquid Nitrogen Production	Nm^3/h	—	—	—	300	200	300
Liquid Nitrogen Purity	$PPmO_2$	—	—	—	≦5	≦5	≦5
Liquid Nitrogen Pressure	MPa.A	—	—	—	0.5	0.5	0.5
Liquid Argon Production	Nm^3/h	—	—	—	—	40	90
Liquid Argon Purity	$PpmO_2$ +$PPmN_2$	—	—	—	—	≦1.5$PpmO_2$ +4$PPmN_2$	≦1.5$PpmO_2$ +4$PPmN_2$
Liquid Argon Pressure	MPa.A	—	—	—	—	0.2	0.2
Device Occupied Area	m^2	250	300	350	850	-4000	-4500

SMALL LIQUID NITROGEN SERIES

NZN-Y Small Liquid Nitrogen Unit

WORKING PRINCIPLE

NZN-Y series liquid nitrogen equipment isbased on the principle of pressure swingadsorption, using high-quality carbonmolecules as adsorbents to produce nitrogenfrom the air under a certain pressure. Thepurified and dried compressed air is subjectedto pressure adsorption and decompressiond esorption in the adsorber. Due to the kineticeffect, the diffusion rate of oxygen in the poresof the carbon molecular sieve is much greaterthan that of nitrogen. When the adsorptiondoes not reach equilibrium, the nitrogen isenriched in the gas phase to form the finishednitrogen. Then the pressure is reduced tonormal pressure,and the adsorbent desorbsthe adsorbed oxygen and other impurities to realize regeneration. Generally, two adsorption towers are set up in the system, one tower absorbsnitrogen and the other tower desorption and regeneration. The two towers are automaticallycontrolled by the PLC program to make the two towers work alternately. The finished nitrogen gas isthen passed through a Stirling refrigerator to produce liquid nitrogen.

TECHNICAL INDICATORS

Liquid Nitrogen Production	5L/day-100L/h	Nitrogen Purity	≥99.9%
Nitrogen Liquefaction	-180℃	Dew Point	≤-40℃ (Normal Pressure)
Nitrogen Pressure	0.8MPa	Device runningcontinuously	8500Hour
Application	Food quick freezing, preservation, processing; medical beauty, vaccine storage, etc.; cryogenic treatment, cold assembly; biological tissue storage; liquid nitrogen fracturing technology; infrared cooling, etc.		
Main Components	Screw air compressor, air purification system, air buffer tank, nitrogen buffer tank, nitrogen generator, control box, nitrogen analyzer, chiller, liquid nitrogen machine, etc.		

SPECIFICATIONS CLASSIFICATION

Model		NZN-3Y	NZN-5Y	NZN-10Y	NZN-20Y	NZN-30Y	NZN-40Y	NZN-50Y
Production (L/DAY)		80	120	240	480	720	1000	1200
Power Consumption(KW)		7.5	8.5	12	25	25	35	35
Electric Parameter		380V/50HZ/three phase electric（customized）						
Cooling Method		Air-cooling		Water-cooling				
Cold Water Require	Flow Rate (m³/h)	/	/	4	8	8	12	12
	Temperature (℃)	/	/	25	25	25	25	25
Nitrogen Require	Flow Rate (m3/h)	≥4	≥6	≥12	≥24	≥36	≥48	≥60
	Pressure (MPaG)	≥0.8				≥1.6	≥0.8	≥1.6
	Purity（%）	≥99.9						
	Dew Point (℃)	≤-70						

APPLICATION FIELD

Artificial Fertilization
- Semen Storage
- Cows, pigs, fish, sheep, horses...and other precious animals...

Biotechnology
- microorganism
- Strains
- Bacteria
- Fungus
- Embryo
- Crop Gene
- vaccine

Medical Science
- Forensic Medicine
- Umbilical Cord Blood
- Stem Cell
- Bone Marrow
- Endocrine Gland
- Blood Vessel
- Urinary
- Skin

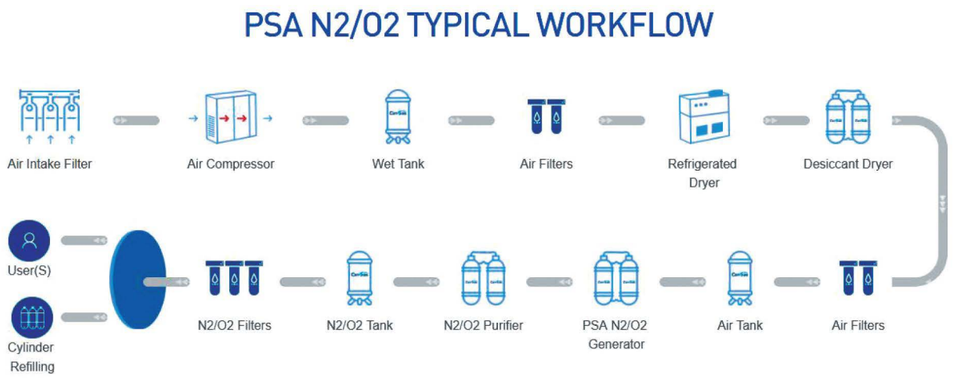
Cryogenic Technology
- Skin Disease
- Cosmetology

Industry
- Food and Beverage
- Superconductor
- Electronic product manufacturing and testing
- Tool and cutting
- Teel mill metal manufacturing and processing
- Light bulb factory
- Drill bit, Drilling
- Automobile and other assembly manufacturing
- Nuclear Industry
- Pharmaceutical

Others
- Aerospace, Aviation
- Fire Fighting
- Festive wedding banquet
- Stage Effect
- Chemical industry, petrochemical industry, coal chemical industry
- Drug Control Institute
- Import and Export Inspection and Quarantine Bureau
- Environmental Protection Agency
- Tobacco

PRESSURE SWING ADSORPTION SERIES

FLOW CHART



1. Air compressor (screw type), Air is used as raw material to collect & compress air to 8 bar.
2. Refrigerated dryer, The standard configuration removes moisture and impurities in the air, so that the air dew point reaches –20℃ (the intermediate configuration uses an adsorption dryer, and the dew point reaches –40℃; the advanced configuration uses a combined dryer, and the dew point reaches– 60,).
3. Precision Filter, A/T/C three–stage filter to remove oil, dust and impurities.
4. Air buffer tank, store pure and dry air for subsequent adsorption and separation of oxygen and nitrogen as raw material storage.
5. Adsorption tower, A&B adsorption tower can work alternately, regenerating adsorption, filling sodium molecular sieve to filter out oxygen molecules.
6. Oxygen & nitrogen analyzer, real–time monitoring and analysis of oxygen & nitrogen purity, indicating that the equipment is working normally and alarming.
7. Valves & pipelines, Intelligent control valves realize automatic operation of equipment, PLC control, SUS304 pipelines.
8. Oxygen & Nitrogen Buffer Tank, Store oxygen & nitrogen with qualified purity, which can be directly piped or used for bottle filling.
9. Pressure regulator, Adjust and temperature the outlet pressure of oxygen & nitrogen (3–6Bar).
10. Dust filter, Remove the dust brought by molecular sieve in oxygen&nitrogen.
11. Check valve, prevent oxygen & nitrogen back flow.
12. Booster, Gas booster, pressurize the oxygen&nitrogen to the filling pressure, generally 150bar or 200bar.
13. Pressure regulating valve, Gas compressor pressure regulation.
14. Filling Manifold, split high–pressure oxygen & nitrogen into each gas cylinder.

TECHNICAL FEATURES

- Pressure Swing Adsorption Technology as the process principle, mature and reliable.
- Intelligent soft cycle switching, purity and flow can be adjusted within a certain range.
- All relevant system components are reasonably configured and the failure rate is low.
- Reasonable internal components, uniform airflow distribution, reduce the impact of high–speed airflow.
- Perfect process design, optimal use effect.
- Unique molecular sieve protection measures extend the service life of Zeolite molecular sieve(carbon molecular sieve).
- The intelligent interlocking unqualified oxygen (nitrogen) emptying device guarantees the oxygen (nitrogen) quality of the product.
- Optional oxygen (nitrogen) device flow, automatic purity adjustment system, remote control system, etc.
- The whole machine leaves the factory, and there is no basic device indoors.
- Convenient installation of matching pipes.
- The operation is simple and stable, and full automation, which can realize unmanned operation.

NZO PSA Oxygen Plant

WORKING PRINCIPLE

Following the principle of pressure swing adsorption, zeolite molecular sieve is used as the adsorbent. Due to the selective adsorption characteristics of zeolite molecular sieve, nitrogen is adsorbed by molecular sieve in a large amount, oxygen is enriched in the gas phase, and nitrogen and oxygen separation is realized under the action of pressure swing adsorption. Adopting double or multi–tower structure, while adsorbing oxygen, desorbing and regenerating at the same time, the opening and closing of pneumatic valves are controlled through intelligent programs such as PLC, so that two or more towers are cycled alternately to continuously produce high–quality oxygen.

TECHNICAL INDICATORS

Oxygen Production	3 ~ 200Nm³/h	Oxygen Purity	93-95%
Oxygen Pressure	0.3-1.0Mpa	Dew Point	≤-40℃(Normal Pressure)
Application Field	Medical, Industrial combustion, Sewage treatment, Aquaculture, etc.		
Main Components	Air compressor, Air purification system, Air buffer tank, Oxygen buffer tank, Adsorption tower, PLC control cabinet, Oxygen analyzer, Booster, Filling manifold, valve& pipeline, etc.		

SPECIFICATIONS CLASSIFICATION

NZO-3

Brand	NUZHUO	Oxygen Production	3Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	0.6Nm³/min/7-8KG	Lead Time	3-5 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	950*620*850	260	5.5
Oxygen Generator	1800*1100*2100	650	1
Filling Station	1270*920*1160	360	5.5
Total	6.014 CBM	1270KG	12KW

NZO-5

Brand	NUZHUO	Oxygen Production	5Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	1Nm³/min/7-8KG	Lead Time	3-5 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1000*790*1100	356	11
Oxygen Generator	2050*1300*2350	840	1
Filling Station	1270*920*1160	360	5.5
Total	8.487 CBM	1556KG	17.5KW

NZO-10

Brand	NUZHUO	Oxygen Production	10Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	2Nm³/min/7-8KG	Lead Time	3-5 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1200*850*1200	680	15
Oxygen Generator	2300*1500*2200	1510	1.5
Filling Station	1360*1000*1160	470	7.5
Total	10.39 CBM	2660 KG	24 KW

NZO-15

Brand	NUZHUO	Oxygen Production	15Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	3Nm³/min/7-8KG	Lead Time	5-10 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1200*900*1258	860	22
Oxygen Generator	2450*1600*2300	2260	1.5
Filling Station	1460*1120*1160	550	11
Total	12.27 CBM	3670 KG	34.5 KW

NZO-20

Brand	NUZHUO	Oxygen Production	20Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	4Nm³/min/7-8KG	Lead Time	5-10 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1360*980*1270	910	30
Oxygen Generator	2650*1700*2400	2700	2
Filling Station	1460*1120*1160	520	15
Total	14.4 CBM	4130 KG	47 KW

NZO-30

Brand	NUZHUO	Oxygen Production	30Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	6Nm³/min/7-8KG	Lead Time	5-10 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1550*1150*1400	1050	45
Oxygen Generator	2800*2000*2500	3255	2.5
Filling Station	1520*1220*1360	550	15
Total	18.21 CBM	4855 KG	62.5 KW

NZO-40

Brand	NUZHUO	Oxygen Production	40Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	8Nm³/min/7-8KG	Lead Time	5-10 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1700*1230*1400	1380	55
Oxygen Generator	3100*2100*2550	3580	3
Filling Station	1720*1220*1360	680	20
Total	24.21 CBM	5640 KG	78 KW

NZO-50

Brand	NUZHUO	Oxygen Production	50Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	10Nm³/min/7-8KG	Lead Time	5-10 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1750*1230*1560	1400	75
Oxygen Generator	3300*2150*2550	3700	3
Filling Station	1720*1220*1360	730	27
Total	24.3 CBM	5830 KG	105 KW

NZO-60

Brand	NUZHUO	Oxygen Production	60Nm³/h
Type	Skid Mounted	Warranty	3 YEAR
Air Consumption	10Nm³/min/7-8KG	Lead Time	5-10 DAYS
Name	Dimension(mm)	Weight(KG)	Power Consumption(KW)
Air Compressor	1750*1230*1560	1480	90
Oxygen Generator	3400*2310*2680	4200	3.5
Filling Station	1720*1280*1420	820	37
Total	27.54 CBM	6500 KG	130.5 KW

*Another capacity can be customized (the above specifications are manufacturing standard models)

NZN PSA Nitrogen Plant

WORKING PRINCIPLE

Following the principle of pressure swing adsorption, high-quality carbon molecular sieve is used as the adsorbent. Under certain pressure, due to the dynamic effect, the diffusion rate of oxygen and nitrogen on the carbon molecular sieve is different. The oxygen molecules are adsorbed by the carbon molecular sieve in large quantities. Nitrogen molecules are enriched in the gas phase to achieve oxygen and nitrogen separation.

Since the adsorption capacity of carbon molecular sieve for oxygen varies significantly with pressure, reducing the pressure can adsorb the oxygen molecules adsorbed by the carbon molecular sieve, so that the carbon molecular sieve can be regenerated and reused.

Two adsorption tower processes are adopted, one is for adsorption and nitrogen production, and the other is for desorption and regeneration, alternating cycles and continuous production of high-quality nitrogen.

WORKING INDICATORS

Nitrogen Production	3 ~ 2000m³/h	Nitrogen Purity	95%-99.999%
Nitrogen Pressure	0.3-1.0Mpa	Dew Point	≤-40℃ (Normal pressure)
Application Field	Industrial use, Food protection, Medical treatment, Material processing, Scientific research and education, Biology, etc.		
Main Components	Air compressor, Air purification system, Air buffer tank, Oxygen buffer tank, Adsorption tower, PLC control cabinet, Oxygen analyzer, Booster, Filling manifold, valve & pipeline, etc.		

SPECIFICATIONS CLASSIFICATION

NZN Standard Model (Purity: 99.5%)

Model	Production (Nm^3/h)	Air Consumption (Nm^3/min)	Air Purification System	Inlet and outlet caliber(mm)	
NZN-5	5	0.25	CJ-0.5	DN15	DN15
NZN-10	10	0.51	CJ-0.5	DN25	DN15
NZN-20	20	0.97	CJ-1	DN25	DN15
NZN-30	30	1.48	CJ-2	DN25	DN25
NZN-40	40	1.95	CJ-2	DN32	DN25
NZN-60	60	2.9	CJ-3	DN32	DN32
NZN-80	80	3.9	CJ-6	DN40	DN32
NZN-100	100	4.65	CJ-6	DN40	DN40
NZN-120	120	5.45	CJ-6	DN40	DN40
NZN-150	150	6.86	CJ-10	DN50	DN40
NZN-200	200	9.12	CJ-10	DN50	DN40
NZN-300	300	13.72	CJ-15	DN65	DN50
NZN-400	400	18.42	CJ-20	DN65	DN50
NZN-600	600	27.26	CJ-30	DN80	DN50
NZN-800	800	36.19	CJ-40	DN100	DN65
NZN-1000	1000	44.93	CJ-50	DN100	DN65
NZN-1200	1200	54.52	CJ-60	DN125	DN100
NZN-1500	1500	68.62	CJ-80	DN150	DN100
NZN-2000	2000	91.65	CJ-100	DN150	DN125
NZN-2500	2500	115.62	CJ-1300	DN200	DN150

NZN97 Model (Purity: 97%)

Model	Production (Nm^3/h)	Air Consumption (Nm^3/min)	Air Purification System	Inlet and outlet caliber(mm)	
NZN97-10	10	0.4	CJ-0.5	DN15	DN15
NZN97-20	20	0.79	CJ-1	DN25	DN25
NZN97-30	30	1.15	CJ-2	DN25	DN25
NZN97-40	40	1.5	CJ-2	DN25	DN25
NZN97-60	60	2.3	CJ-3	DN32	DN25
NZN97-80	80	3.1	CJ-3	DN40	DN32
NZN97-100	100	3.67	CJ-6	DN40	DN32
NZN97-120	120	4.32	CJ-6	DN40	DN40
NZN97-150	150	5.45	CJ-6	DN50	DN40
NZN97-200	200	7.52	CJ-10	DN50	DN50
NZN97-300	300	10.81	CJ-12	DN65	DN50
NZN97-400	400	14.57	CJ-20	DN65	DN50
NZN97-600	600	21.62	CJ-30	DN80	DN65
NZN97-800	800	29.14	CJ-30	DN100	DN65
NZN97-1000	1000	36.94	CJ-40	DN100	DN80
NZN97-1200	1200	43.24	CJ-50	DN125	DN100
NZN97-1500	1500	54.71	CJ-60	DN125	DN100
NZN97-2000	2000	72.19	CJ-80	DN150	DN125
NZN97-2500	2500	99.99	CJ-100	DN150	DN125

NZN99 Model (Purity: 99%)

Model	Production (Nm^3/h)	Air Consumption (Nm^3/min)	Air Purification System	Inlet and outlet caliber(mm)	
NZN99-10	10	0.45	CJ-1	DN15	DN15
NZN99-20	20	0.92	CJ-1	DN25	DN25
NZN99-30	30	1.3	CJ-2	DN25	DN25
NZN99-40	40	1.8	CJ-2	DN32	DN25
NZN99-60	60	2.2	CJ-3	DN32	DN25
NZN99-80	80	3.5	CJ-6	DN40	DN32
NZN99-100	100	4.14	CJ-6	DN40	DN32
NZN99-120	120	4.89	CJ-6	DN50	DN40
NZN99-150	150	6.11	CJ-10	DN50	DN40
NZN99-200	200	8.18	CJ-10	DN50	DN40
NZN99-300	300	12.22	CJ-20	DN65	DN50
NZN99-400	400	16.45	CJ-20	DN65	DN50
NZN99-600	600	24.91	CJ-30	DN80	DN50
NZN99-800	800	32.90	CJ-40	DN100	DN65
NZN99-1000	1000	42.30	CJ-50	DN125	DN65
NZN99-1200	1200	48.88	CJ-50	DN125	DN65
NZN99-1500	1500	61.10	CJ-70	DN125	DN100
NZN99-2000	2000	81.78	CJ-90	DN150	DN100
NZN99-2500	2500	101.52	CJ-110	DN200	DN125

NZN39 Model (Purity: 99.9%)

Model	Production (Nm^3/h)	Air Consumption (Nm^3/min)	Air Purification System	Inlet and outlet caliber(mm)	
NZN39-5	5	0.4	KJ-0.5	DN15	DN15
NZN39-10	10	0.7	KJ-1	DN25	DN25
NZN39-20	20	1.3	KJ-2	DN25	DN25
NZN39-30	30	2	KJ-2	DN25	DN25
NZN39-40	40	2.55	KJ-3	DN32	DN25
NZN39-60	60	4.0	KJ-6	DN40	DN32
NZN39-80	80	5.6	KJ-6	DN40	DN40
NZN39-100	100	7	KJ-10	DN50	DN40
NZN39-120	120	8.4	KJ-10	DN50	DN40
NZN39-150	150	10	KJ-10	DN50	DN40
NZN39-200	200	14	KJ-20	DN65	DN50
NZN39-300	300	20	KJ-20	DN80	DN50
NZN39-400	400	28	KJ-30	DN80	DN65
NZN39-600	600	41	KJ-40	DN100	DN65
NZN39-800	800	55	KJ-60	DN125	DN65
NZN39-1000	1000	70	KJ-70	DN125	DN65
NZN39-1200	1200	80	KJ-80	DN150	DN80
NZN39-1500	1500	98	KJ-100	DN150	DN80

NZN49 Model (Purity: 99.99%)

Model	Production (Nm^3/h)	Air Consumption (Nm^3/min)	Air Purification System	Inlet and outlet caliber(mm)	
NZN49-5	5	0.5	KJ-0.5	DN15	DN15
NZN49-8	8	0.98	KJ-1	DN25	DN15
NZN49-20	20	2.1	KJ-3	DN32	DN25
NZN49-30	30	2.9	KJ-3	DN40	DN25
NZN49-40	40	4.1	KJ-6	DN40	DN25
NZN49-60	60	6.3	KJ-6	DN50	DN32
NZN49-80	80	8.2	KJ-10	DN50	DN40
NZN49-100	100	9.2	KJ-10	DN65	DN40
NZN49-120	120	11	KJ-12	DN65	DN40
NZN49-140	140	13.1	KJ-20	DN65	DN50
NZN49-160	160	15.2	KJ-20	DN80	DN50
NZN49-180	180	16.9	KJ-20	DN80	DN50
NZN49-200	200	18.7	KJ-20	DN80	DN50
NZN49-250	250	23.1	KJ-30	DN100	DN50
NZN49-300	300	28.7	KJ-30	DN100	DN50
NZN49-350	350	31.96	KJ-40	DN125	DN50
NZN49-400	400	36.66	KJ-40	DN125	DN65
NZN49-450	450	41.36	KJ-50	DN125	DN65
NZN49-500	500	46.06	KJ-50	DN125	DN80
NZN49-550	550	48.88	KJ-60	DN125	DN80
NZN49-600	600	54.52	KJ-60	DN125	DN80
NZN49-650	650	59.22	KJ-70	DN150	DN80
NZN49-700	700	63.92	KJ-70	DN150	DN80
NZN49-800	800	72.80	KJ-80	DN150	DN100
NZN49-1000	1000	91.30	KJ-100	DN150	DN125

NZN59 Model (Purity: 99.999%)

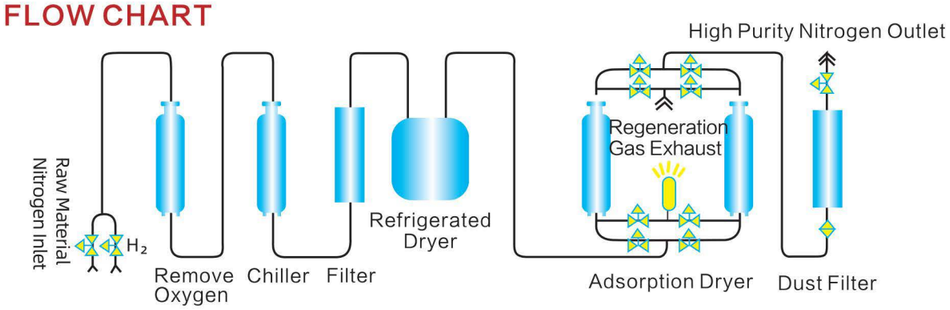
Model	Production (Nm^3/h)	Air Consumption (Nm^3/min)	Air Purification System	Inlet and outlet caliber(mm)	
NZN59-5	5	0.78	KJ-1	DN25	DN15
NZN59-10	10	1.75	KJ-2	DN25	DN15
NZN59-20	20	3.55	KJ-6	DN40	DN15
NZN59-30	30	5.25	KJ-6	DN40	DN25
NZN59-40	40	7.0	KJ-10	DN50	DN25
NZN59-50	50	8.7	KJ-10	DN50	DN25
NZN59-60	60	10.5	KJ-12	DN50	DN32
NZN59-80	80	13.75	KJ-20	DN65	DN40
NZN59-100	100	16.64	KJ-20	DN65	DN40
NZN59-150	150	24.91	KJ-30	DN80	DN40
NZN59-200	200	33.37	KJ-40	DN100	DN50
NZN59-300	300	49.82	KJ-60	DN125	DN50

NZN-H Hydrogenation Nitrogen Purification Equipment

WORKING INDICATORS

Nitrogen Production	10 ~ 20000Nm^3/h	Process Technology	A purification process combining two high-efficiency catalysts is used. Chlorine is deoxygenated at normal temperature, and excess hydrogen is removed (if hydrogen is required), and water and impurities are removed through a purification process to obtain high-purity nitrogen.
Nitrogen Purity	≥99.9995%		
Nitrogen Content	1 ~ 1000ppm		
Oxygen Content	≤5ppm		
Dew Point	≤-60℃		

FLOW CHART



TECHNICAL FEATURES

- Automatically control the amount of hydrogenation, high degree of automation, safe and reliable
- Using high–efficiency catalyst, advanced technology and stable performance
- Using safe and reliable control components, reliable operation
- Intelligent interlocking and emptying, multiple fault alarms, enabling users to find and solve problems in time
- Deoxygenation at normal temperature, not need activation, wide range of deoxygenation

SPECIFICATION CLASSIFICATION

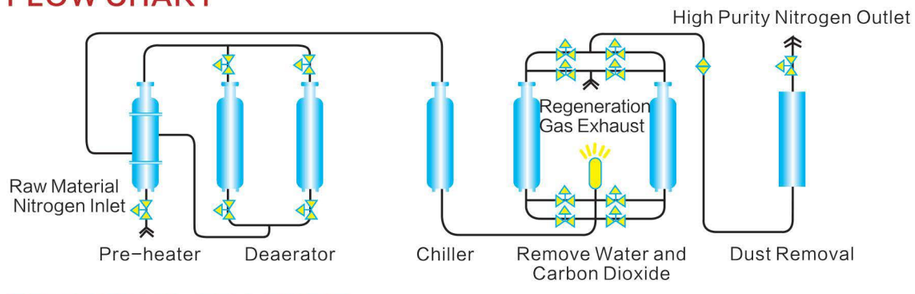
Model	NZN-10Q	NZN-20Q	NZN-40Q	NZN-60Q	NZN-100Q	NZN-150Q	NZN-200Q	NZN-300Q	NZN-400Q	NZN-500Q
Rated Gas Capacity (Nm^3/h)	11	22	44	60	110	165	220	330	440	550
Rated Nitrogen Production (Nm^3/h)	10	20	40	60	100	150	200	300	400	500
Electric Parameter V/HZ	380V,50HZ(customized)									
Installed Power (KW)	1	1.8	3.4	5.2	8.4	12.6	16.4	22	22.6	42
Hydrogen Consumption (Nm^3/h)	0.15	0.3	0.45	0.7	1.2	1.7	2.3	3.4	4.5	5.6
Cold Water（t/h）	0.2	0.4	0.8	1.2	2.0	3.0	4.0	6.0	8.0	10.0

NZN-C Carbon-loaded Nitrogen Purification Equipment

TECHNICAL INDICATORS

Nitrogen Production	10 ~ 20000Nm³/h	Process Technology	At a certain temperature, the residual oxygen in the nitrogen and the carbon provided by the carbon-supported catalyst are oxidized and reacted: the CO2 generated by C+02 is removed by the pressure adsorption process and deeply dehydrated to obtain high-purity nitrogen.
Nitrogen Purity	≥99.9995%		
Dust Content	≤0.01pm		
Oxygen Content	5ppm		
Dew Point	≤-60℃		

FLOW CHART



TECHNICAL FEATURE

- Well stability, and the oxygen content is strictly controlled below 5PPm.
- High purity, Nitrogen purity ⩾99.9995%.
- Low water content, ambient dew point⩽-60,.
- No hydrogen which suit for processes that have strict requirements on hydrogen and oxygen.

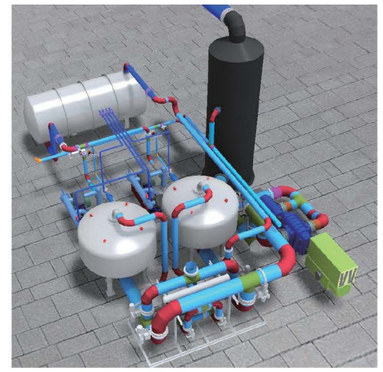
SPECIFICATION CLASSIFICATION

Model	NZN -10Q	NZN -20Q	NZN -40Q	NZN -60Q	NZN -80Q	NZN -100Q	NZN -120Q	NZN -160Q	NZN -200Q	NZN -250Q	NZN -300Q	NZN -400Q
Rated Gas Capacity (Nm³/h)	11	22	44	60	88	110	132	176	220	275	330	440
Rated Nitrogen Production (Nm³/h)	10	20	40	60	80	100	120	160	200	250	300	400
Electric Parameter V/HZ	220V,50HZ		380V,50HZ									
Installed Power (KW)	1.5	3	6	9	12	15	18	24	30	37.5	45	60
Actual Power (KW)	0.7	1.4	2.7	4.2	5.8	7.2	8.3	11.7	14.2	18.1	21.9	29.3
Catalyst Consumption (KG)	16	30	65	100	130	160	195	250	320	400	480	640
Cold Water Circulation (Nm³/h)	0.1	0.2	0.4	0.6	0.8	1.0	1.2	1.6	2.0	2.5	3.0	4.0

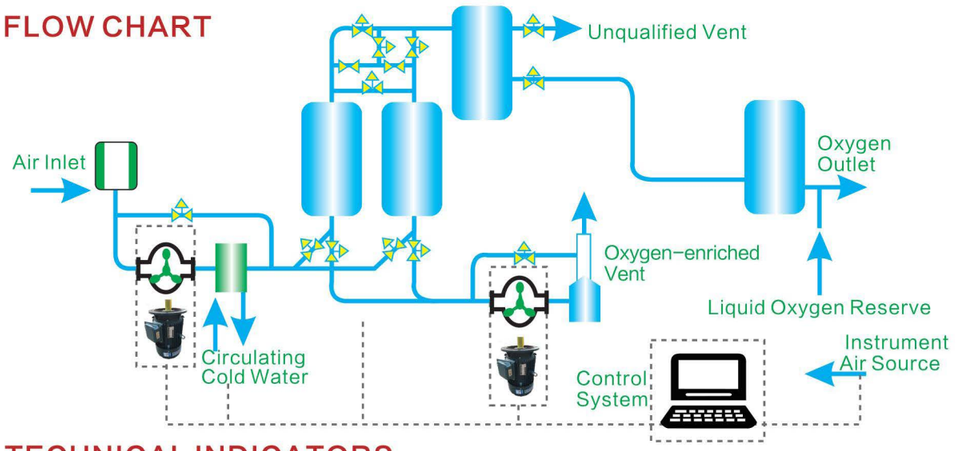
VPSA Oxygen Plant

WORKING PRINCIPLE

VPSA oxygen plant is mainly composed of blower, vacuum pump, switching valve, adsorption tower and oxygen buffer tank. The raw material air is pressurized by the Roots blower into the adsorption tower filled with oxygen molecular sieve, where moisture, carbon dioxide, and nitrogen are adsorbed to produce oxygen. When the adsorption reaches a certain level, it is evacuated by a vacuum pump, and the adsorbed water, carbon dioxide, nitrogen and a small amount of other gas groups are drawn out and discharged to the atmosphere, and the adsorbent is regenerated. The above process steps are automatically controlled by PLC and switching valve system.



FLOW CHART



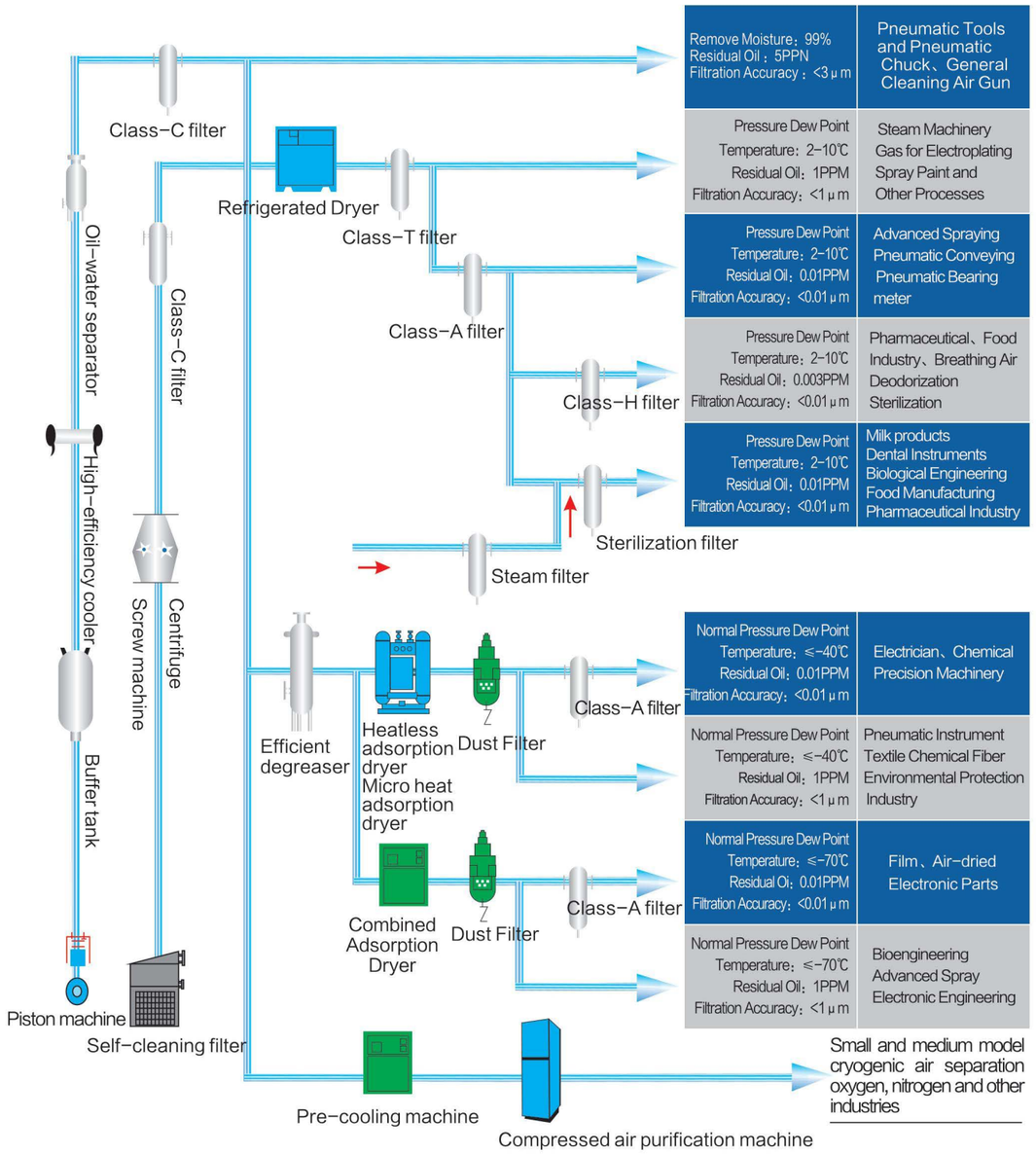
TECHNICAL INDICATORS

Model	100~10000Nm³/h	Oxygen Pressure	20Kpa (can be pressurized)
Oxygen Purity	90-95%	Equipment Structure	Blower, Vacuum Pump, A&B Adsorption Tower

APPLICATION FELD

Metallurgical Industry	Electric arc furnace steel making, Blast furnace iron making with oxygen enrichment, Shaft furnace with oxygen enrichment for combustion
Non-ferrous Metallurgy Industry	Lead metallurgy, Copper metallurgy, Zinc metallurgy , Aluminum metallurgy, Oxygen enrichment in various furnaces
Environmental Protection Industry	Drinking water treatment, Wastewater treatment, Pulp bleaching, Sewage biochemical treatment
Chemical Industry	Various oxidation reactions, Ozone production, Coal gasification
Medical Industry	Oxygen bar, Oxygen therapy, Coal gasification
Aquatic Industry	Sea and freshwater aquaculture
Other Industries	Fermentation,Cutting, Glass furnace, Air conditioning, Waste incineration

COMPRESSED AIR PURIFICATION SERIES



*All the equipment involved in the above flow chart can be selected and produced according to the parameters provided by the customer. The following introduces the specification information of some major products

NZX Heatless Compressed Air Adsorption Dryer

TECHNICAL INDICATORS

Inlet Temperature	0-45℃	Dew Point	40℃ ~ -70℃
Inlet Oil Content	≤0.1ppm	Regeneration Gas Consumption	≤12%
Working Pressure	0.6-1.0MPa	Desiccant	Active Alumina
Composition: Two alternately used adsorption towers, A silencer system, A switching valve, A control system and a gas source processing unit			

SPECIFICATIONS CLASSIFICATION

Model		NZX -1	NZX -2	NZX -3	NZX -6	NZX -10	NZX -12	NZX -16	NZX -20	NZX -30	NZX -40	NZX -60	NZX -80	NZX -100	NZX -150	NZX -200
Rated Gas Capacity (Nm^3/min)		1.2	2.4	3.8	6.5	10.7	13	16.9	23	33	45	65	85	108	162	218
Inlet and Outlet Diameter DN (mm)		25	25	32	40	50	50	65	65	80	100	125	150	150	200	250
Electric Parameter/ Power V/Hz/W		220/50/100														
Dimension (mm)	Length	930	930	950	1220	1350	1480	1600	1920	1940	2200	2020	2520	2600	3500	3600
	Width	350	350	350	500	600	680	760	850	880	990	1000	1000	1090	1650	1680
	Height	1100	1230	1370	1590	1980	2050	2120	2290	2510	2660	2850	3250	3070	3560	3660
Weight(Kg)		200	250	310	605	850	1050	1380	1580	1800	2520	3150	3980	4460	5260	6550

NZW Micro Heat Compressed Air Adsorption Dryer

TECHNICAL INDICATORS

Air Handling Volume	1 ~ 500Nm³/min	Switch Time	120min(adjustable)
Working Pressure	0.6 ~ 1.0MPa	Inlet and Outlet Air Pressure Drop	≤0.021MPa
Air Inlet Temperature	≤45℃	RegenerationGas Consumption	≤6%
Dew Point	-40℃ ~ -70℃	Regeneration Method	Micro Heat Regeneration
Power	Customized	Environmental Temperature	≤45℃
Composition: Two alternately used adsorption cylinders, One electric heating device, One silencer system, One switching valve device, One electric control system and air source processing unit			

SPECIFICATIONS CLASSIFICATION

Model		NZX -3	NZX -6	NZX -10	NZX -12	NZX -16	NZX -20	NZX -30	NZX -40	NZX -60	NZX -80	NZX -100	NZX -150	NZX -200
Rated Gas Capacity Nm³/min		3.8	6.5	10.7	13	16.9	23	33	45	65	85	108	162	218
Inlet and Outlet Diameter DN (mm)		32	40	50	50	65	65	80	100	125	150	150	200	250
Electric Parameter V/Hz		220/50						380/50						
Power Consumption(KW)		1.5	3	5	5	6	9	12	18	24	27	36	60	90
Dimension (mm)	Length	930	1220	1230	1230	1590	1920	1940	2000	2020	2520	2440	3200	3200
	Width	350	500	530	530	630	850	880	900	920	1000	1090	1850	1850
	Height	1370	1600	1800	1930	2350	2300	2460	2530	2770	3250	2970	3380	3400
Weight (Kg)		370	675	900	1050	1380	1580	1800	2520	3150	4100	4760	5820	7280



NZY Waste Heat Regeneration Compressed Air Adsorption Dryer

TECHNICAL INDICATORS

Air Handling Volume	20 ~ 500Nm³/min	Dew Point	≤-40℃ ~ -70℃ (Normal Pressure)
Working Pressure	0.6 ~ 1.0MPa	Control Method	Micro Computer Automatic Control
Air Inlet Temperature	≤110℃ ~ 150℃	Working Period	6 ~ 8h
Technology	Variable Temperature and Pressure Swing Adsorption	Regeneration Gas Consumption	≤1 ~ 3%
Composition: Two alternately used adsorption towers, A silencer system, An air cooler, A vapor-liquid separator, An optional auxiliary electric heating system, A switching valve, A control system and a gas source processing unit			

TECHNICAL FEATURES

- Using the world's advanced microcomputer controller, it can realize communication and joint control with excellent performance.
- Selecting high–quality butterfly valve which can switch quickly, and the action is accurate and reliable.
- Adopting gas diffusion device, the gas flow in the tower is evenly distributed, the unique filling method helps the adsorbent has a long service life.
- The regeneration process uses the waste heat of the air compressor, and the regeneration energy consumption is low.
- The overall layout is reasonable, the structure is compact, the installation is simple, and the use and maintenance are convenient.

SPECIFICATIONS CLASSIFICATION

Model	Flow Rate Nm³/min	Inlet and Outlet Pipe Diameter Dn (mm)	Weight (Kg)	Dimension Length*Width*Height (mm)	Electric Parameter, Power (No auxiliary heating)
NZY-40	40	100	2400	2600*1950*2750	220V/50HZ,100W
NZY-50	50	125	2900	2600*2050*2950	220V/50HZ,100W
NZY-60	60	125	3300	3100*2050*2950	220V/50HZ,100W
NZY-80	80	150	4500	3300*2250*3250	220V/50HZ,100W
NZY-100	100	150	6350	4000*2250*3250	220V/50HZ,150W
NZY-120	120	150	7850	4000*2250*3550	220V/50HZ,150W
NZY-150	150	200	9600	4600*2750*3450	220V/50HZ,150W
NZY-180	180	200	12000	4900*2850*3550	220V/50HZ,150W
NZY-200	200	200	13000	4900*2850*3850	220V/50HZ,200W
NZY-250	250	250	14000	5400*3150*3650	220V/50HZ,200W
NZY-300	300	250	16500	5900*3450*3950	220V/50HZ,200W
NZY-400	400	300	18600	6300*3600*4050	220V/50HZ,300W
NZY-500	500	350	19500	6600*3700*4150	220V/50HZ,300W

NZG Blower Regeneration Compressed Air Adsorption Dryer

TECHNICAL INDICATORS

Air Handling Volume	20 ~ 500Nm³/min	Working Period	4 ~ 6h
Working Pressure	0.6 ~ 1.0MPa	Regeneration Gas Consumption	≤1 ~ 3%
Air Inlet Temperature	≤40℃	Control Method	Micro Computer Automatic Control
Dew Point	≤-30℃ ~ -60℃ (Normal Pressure)	Energy-saving Type	Adsorption Purification Principle
Composition:Two adsorbers used alternately, An electric heater, A blower, A switching valve, and a control system			

TECHNICAL FEATURES

- Activated alumina specially designed for air drying with a fixed bed layout, excellent bed placement performance
- Adopting PLC programmable program controller to switch valves automatically, LCD text displays working status, real–time monitoring of the entire process.
- Adopting four hours long cycle switching.
- The regeneration air source uses ambient air during the heating period, and uses its own dry air during the blowing and cooling period to save regeneration air consumption.
- This device is a low–pressure drying device.
- The regenerative heat source adopts electric heating.

SPECIFICATIONS CLASSIFICATION

Model	Flow Rate Nm³/min	Inlet and Outlet Pipe Diameter Dn (mm)	Weight (Kg)	Dimension Length*Width*Height (mm)	Electric Parameter, Power (No auxiliary heating)
NZG-40	40	100	2400	2600*1950*2750	220V/50HZ,100W
NZG-50	50	125	2900	2600*2050*2950	220V/50HZ,100W
NZG-60	60	125	3300	3100*2050*2950	220V/50HZ,100W
NZG-80	80	150	4500	3300*2250*3250	220V/50HZ,100W
NZG-100	100	150	6350	4000*2250*3250	220V/50HZ,150W
NZG-120	120	150	7850	4000*2250*3550	220V/50HZ,150W
NZG-150	150	200	9600	4600*2750*3450	220V/50HZ,150W
NZG-180	180	200	12000	4900*2850*3550	220V/50HZ,150W
NZG-200	200	200	13000	4900*2850*3850	220V/50HZ,200W
NZG-250	250	250	14000	5400*3150*3650	220V/50HZ,200W
NZG-300	300	250	16500	5900*3450*3950	220V/50HZ,200W
NZG-400	400	300	18600	6300*3600*4050	220V/50HZ,300W
NZG-500	500	350	19500	6600*3700*4150	220V/50HZ,300W

NZL Refrigerated Compressed Air Adsorption Dryer

Normal Temperature Air–cooled Refrigeration Dryer

TECHNICAL INDICATORS

Name	Air-cooled Refrigeration Dryer	Rated Air Inlet Temperature	≤45℃(Min5℃)
Air Handling Volume	1 ~ 500Nm³/min	Environmental Temperature	≤42℃(Min℃)
Working Pressure	0.6 ~ 1.0MPa	Inlet and Outlet Air Pressure Drop	≤0.02MPa
Dew Point	≤-23℃(Normal Pressure)	Installation Method	Indoor Installation Without Basic Equipment

SPECIFICATIONS CLASSIFICATION

Parameter \ Model	NZL -1F	NZL -3F	NZL -6F	NZL -10F	NZL -12F	NZL -15F	NZL -20F	NZL -30F	NZL -40F	NZL -60F
Air Flow Rate (Nm³/min)	1.6	3.8	6.5	11.7	13	17	23	34	45	65
Normal Pressure	1PH/220V/50Hz				3PH/380V/50Hz					
Compressor Power (kw)	0.39	0.915	1.57	1.94	2.57	2.94	4.4	5.5	7.35	11.03
Fan Power (W)	80	90	120	180	240	360	360	750	750	1140
Inlet and Outlet Diameter (mm)	25	40	40	50	50	80	80	100	100	125
Dimension (mm) Length	760	760	940	1100	1300	1400	1550	1850	1850	2200
Dimension (mm) Width	430	430	550	600	620	650	800	800	800	950
Dimension (mm) Height	715	715	800	950	980	950	1200	1300	1300	1600
Weight (Kg)	79	84	173.5	260	275	380	460	650	750	1350

Normal Temperature Water-cooled Refrigerated Dryer

TECHNICAL INDICATORS

Name	Water-cooled Refrigerated Dryer	Rated Air Inlet Temperature	≤45℃(Min5℃)
Air Handling Volume	1 ~ 500Nm³/min	Environmental Temperature	≤45℃(Min℃)
Working Pressure	0.6 ~ 1.0MPa	Cold Water Inlet Temperature	≤32℃(Min5℃)
Dew Point	≤-23℃(Normal Pressure)	Installation Method	Indoor Installation Without Basic Equipment
Cold Water Inlet Pressure	0.2 ~ 0.4MPa	Inlet and Outlet Air Pressure Drop	≤0.02MPa

SPECIFICATIONS CLASSIFICATION

Model / Parameter		NZL -6W	NZL -10W	NZL -12W	NZL -15W	NZL -20W	NZL -30W	NZL -40W	NZL -60W	NZL -80W	NZL -100W	NZL -120W	NZL -150W	NZL -200W	NZL -300W
AirFlow Rate (Nm³/min)		6.5	10	13	17	23	34	45	65	86	110	120	168	220	330
Electric Parameter		1PH/220V/50Hz							3PH/380V/50Hz						
Cold Water Circulation (Nm³/min)		1.57	1.94	2.57	2.94	4.4	5.5	7.35	11.03	14.7	22.05	14	30	36	55
Air Takeover Caliber DN (mm)		1	1.6	1.8	2.4	3.2	4.8	6.3	9.5	12.6	15.8	18.9	23.6	32	47.2
Cold Water Pipe Diameter		G1/2ⁿ	G1/2ⁿ	G1/2ⁿ	G3/4ⁿ	G3/4ⁿ	G1/¼ⁿ	G1/¼ⁿ	G1½ⁿ	G2ⁿ	G2ⁿ	G2ⁿ	G2ⁿ	G2ⁿ	DN80
Dimension (mm)	Length	940	1100	1300	1400	1550	1850	1850	2250	2400	2500	2600	3100	3400	4500
	Width	550	600	620	650	800	800	800	1000	1200	1400	1450	1750	1450	1900
	Height	800	980	980	950	1200	1300	1500	1850	2020	1650	2100	2520	2400	2595
Weight (Kg)		173.5	260	275	380	460	650	750	1350	2000	2300	2200	3000	3800	5800

NZD Combined Compressed Air Adsorption Dryer

TECHNICAL INDICATORS

The combined dryer is mainly composed of a combination of a refrigerated dryer and an adsorption dryer, sometimes accompanied by corresponding filter, dust removal, oil removal and other devices, so that the dryer can adapt to more complicated gas environments

Air Handling Volume	1 ~ -500Nm³/min	Cooling Method	Air-cooled /Water-cooled
Working Pressure	0.6 ~ 1.0MPa	Dew Point	-40℃ ~ -70℃ (Normal Pressure)
Air Inlet Temperature	≤45℃(Min5℃)	Inlet and Outlet Air Pressure Drop	≤0.03MPa
Switch Time	120min(adjustable)(Micro Heat) 300 ~ 600s (adjustable) (Heatless)	Installation Method	Indoor Installation Without Basic Equipment
Regeneration Gas Consumption	3-6 %	Environmental Temperature	≤42℃

SPECIFICATIONS CLASSIFICATION

Model / Parameter		NZD -1	NZD -3	NZD -6	NZD -10	NZD -12	NZD -15	NZD -20	NZD -30	NZD -40	NZD -60	NZD -80	NZD -100	NZD -150	NZD -200	NZD -250	NZD -300
Air Handling Volume (Nm³/min)		1	3.8	6.5	11	12	17	22	32	42	65	85	110	160	200	250	300
Electric Parameter		AC220V/50Hz							AC380V/50Hz								
Compressor Power(kw)		0.28	0.915	1.57	1.94	1.7	2.94	4.4	5.5	7.35	11.03	14.7	22.05	30	23	28	36
Air Takeover Caliber DN (mm)		25	25	40	50	50	65	65	80	100	100	100	150	200	200	250	250
Cooling Water Pipe Diameter (Water Cooling)		—	—	G1/2ⁿ	G3/4ⁿ	G3/4ⁿ	G1ⁿ	G1ⁿ	G1½ⁿ	G1½ⁿ	G1½ⁿ	G2ⁿ	G2ⁿ	G2ⁿ	G3ⁿ	G3ⁿ	G3ⁿ
Cold Water Volume(m³/h)		—	—	1	1.6	1.9	2.4	3.2	4.8	6.3	9.5	12.7	15.8	23.6	31.5	39.3	47.1
Fan Power (Air Cooling)		100	90	120	180	290	360	360	—	—	—	—	—	—	—	—	—
Desiccant Weight(Kg)		40	70	110	165	185	265	435	580	700	970	1660	1950	2600	3200	3710	4460
Electric Heating Power (Micro Heat)(Kw)		1.5	1.5	1.9	2.5	2.5	4.5	7.5	11.4	15	20.4	30.6	40.8	60	72	84	96
Dimensions (mm)	Length	900	960	1070	1230	1450	1600	1700	1900	2100	2650	2750	3000	3500	4160	4300	4500
	Width	790	1300	1450	1700	1250	1960	2070	2460	2810	3500	3700	4380	4650	2890	2950	2950
	Height	1100	2200	2040	2180	1850	2360	2410	2820	2840	2890	2990	3305	3420	3200	3400	3800
Weight (Kg)		300	270	540	680	1200	1300	1390	1960	2340	3400	4380	6430	9050	13100	14500	15200

KHV Intelligent Control Valve

Pneumatic Control Valve:

Pneumatic Film Sanitary Control Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN500
Manufacturing Standards: GB,JB,HG,ANSI,JIS

Pneumatic Membrane Control Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN500
Manufacturing Standards: GB,JB,HG,ANSI,JIS

Electric Control Valve:

Electric Temperature Control Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN500
Manufacturing Standards: GB,JB,HG,ANSI,JIS

Intelligent Electric Sleeve Control Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN500
Manufacturing Standards: GB,JB,HG,ANSI,JIS

Self-operated Control Valve:

Self-operated Single Seat Control Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN500
Manufacturing Standards: GB,JB,HG,ANSI,JIS

Self-operated Sleeve Control Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN500
Manufacturing Standards: GB,JB,HG,ANSI,JIS

Nitrogen Seal Valve:

Self-operated Nitrogen Seal Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN200
Manufacturing Standards: GB,JB,HG,ANSI,JIS

Shut-off Valve:

Pneumatic Piston Shut-off Valve
Nominal Pressure: PN16–PN320
Caliber: DN15–DN500
Manufacturing Standards: GB,JB,HG,ANSI,JIS

GWX Oil Free Compressor

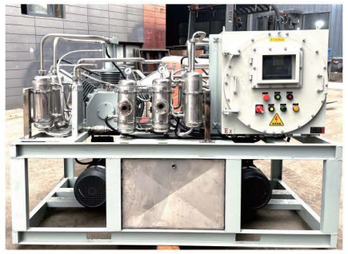
TECHNICAL FEATURES

The equipment does not need to add lubricating oil, and the exhaust gas does not contain oil and oil vapor, so it can be protected from pollution, eliminating the need for complex filtration and purification systems, saving equipment costs and maintenance costs, and has significant features such as safety, reliability, and easy operation.

WORKING PRINCIPLE

The Oil-free booster compressor is composed of main engine, electric motor, instrument and electrical control components. When the turbocharger is working, first the electric motor drives the crankshaft through the V-belt drive to produce a rotational movement; then the piston reciprocates through the connecting rod to change the cylinder volume;Finally, the gas pressure in the cylinder increases, and the gas is injected into the storage tank through the exhaust valve, the one-way valve and the pipeline for use.

SPECIFICATIONS CLASSIFICATION



Medium	O_2, N_2, Ar, CO_2, H_2, Biogas, Helium,etc
Intake air flow	3-200Nm³/h
Inlet pressure	15KPa-0.8MPa (Customize)
Exhaust pressure	0.8-25.0MPa
Inlet temperature	≤25℃
Exhaust temperature	≤55℃
Compression method	All Oil-free & Piston type
Compression level	Level 4
Cooling method	Water Cooling & Air cooling
Control method	Intelligent PLC touch screen control
Motor Power	5.5-55KW
Voltage /Frequency	380V/50HZ/3PH
Protection Level	IP23
Explosion-proof Grade	For Biogas, H_2, Flammable and explosive gases...

NZO Oxygen Concentrator

Model	NZO-5L~NZO-60L	Oxygen Production	5/10/15/20/30L/min (customized)
Technology	Pressure Swing Adsorption（PSA）	Oxygen Purity	93-95%
Molecular Sieve	Zeolite Molecular Sieve	Dimension	50*33.5*66cm
Related Power	600W	Weight	40kg
Electric Parameter	~220V/50HZ	Noise Level	≤70 decibel
The product is mainly composed of compressor, zeolite molecular sieve, transfer switch, control panel, display board, flow meter, condenser, automatic drain and other components. If you need to add atomization components (atomization cup, connecting pipe, etc.)			





ENTERPRISE OVERVIEW

Client Feedback






Packing and Delivery