PSA separation Equipment

COMPTECH

About us

COMPTECH COMPRESSOR TECHNOLOGY CO.,LTD. (stock code 836212, before the share reform name: JIANGSU JIAYU FLUID EQUIPMENT CO., LTD) is a high-tech enterprise, located in Jiangsu Hai'an high-tech industrial park. The company is located in the economic prosperity of the Yangtze River Delta, the traffic is very convenient, and also in Shanghai two-hour economic circle.

Since the 90s of last century, we have been committed to the cause of gas engineering, specializing in gas separation, purification equipment R&D and manufacturing. And relying on a number of research institutes, the direction for the development of high-tech products, to create brand-name products as the goal, and strive to the industry's most cutting-edge technology into the product, many times won the provincial outstanding product award, and the national new product award. Our products are widely used in electric power, petroleum, chemical, metallurgy, cement, machinery, electronics, pharmaceutical, food and environmental protection industries.

COMPTECH is a professional manufacturer of Class III pressure vessel qualification (license number TS2210G52-2021). With nearly thirty years of manufacturing chemical machinery and pressure vessel manufacturing history, strong technical force, well-equipped production, manufacturing process is mature, advanced detection methods, quality management system sound, all products through the national quality and technical supervision departments to monitor the factory. In the main pressure vessels and chemical machinery on the basis of the formation of water heaters, volumetric heat exchangers, various types of reactor, boiler equipment, textile stereotypes equipment, glass fiber auxiliary equipment, cement machinery ancillary equipment, chemical complete sets of equipment , Desulfurization supporting equipment, such as the top ten series of product design, manufacture and installation.

The company strictly enforce the 6S management standards, Standardized physical and chemical measurement system has been established--tensile laboratory, chemical analysis room, welding laboratory, X-ray inspection room, water Pressure test area, the standard welding materials library, the implementation of a comprehensive quality management, with a complete product files, and product tracking management services. Over the years the company with its stable and reliable product quality, honest and standardized business credit, warm and thoughtful service, in good faith to face the majority of customers and reputation.


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CERTIFICATE
CICC


江苏嘉宇

CMS Series

PSA Molecular Nitrogen Generator

Product Range

- Nitrogen Volume: 1~3000Nm³/h
- Nitrogen Purity: 97~99.999%
- N_2 Dew Point: ≤-40℃
- Nitrogen Pressure: 0.15~1.0Mpa

Principle

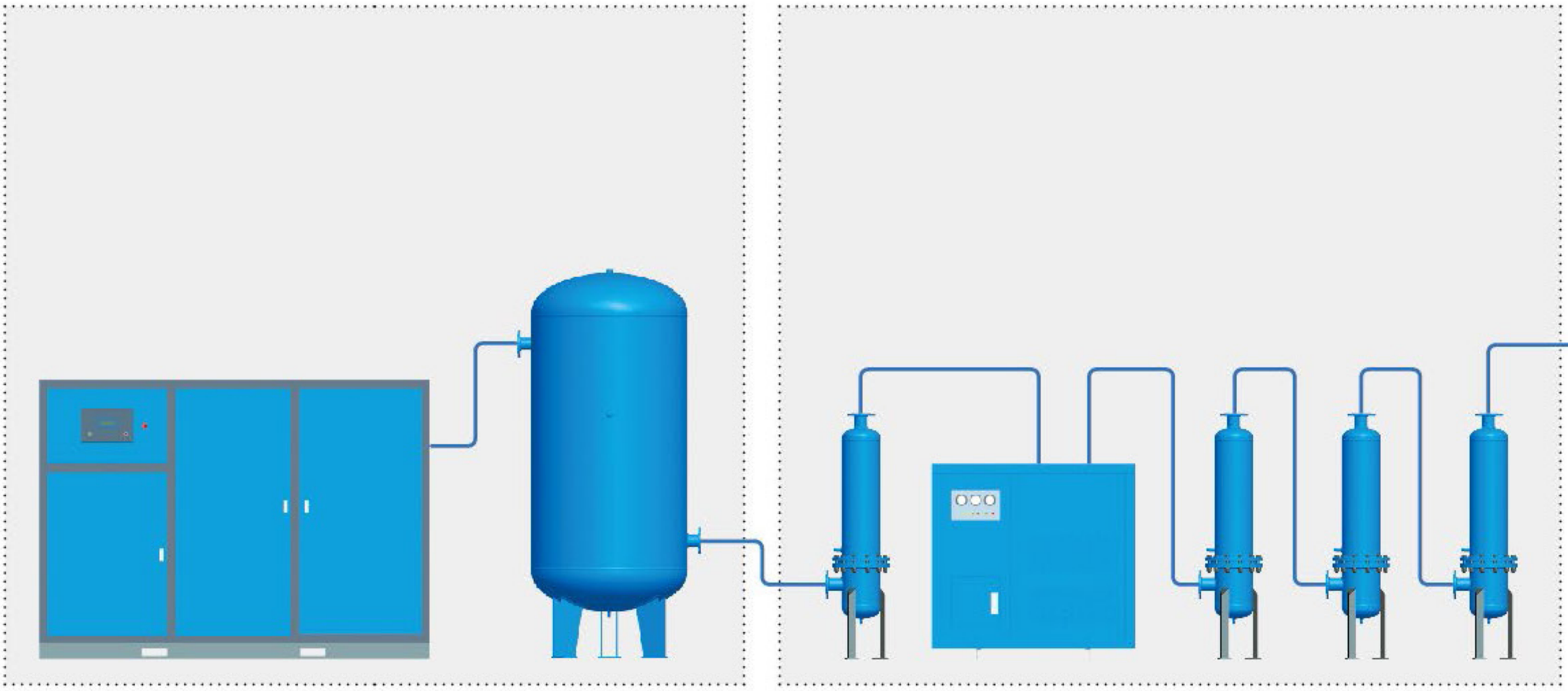
The raw material compressed air through the air pretreatment device to remove dust, oil and other solid impurities and water, through the air diffusion distributor into the dry molecular sieve and oxygen separation of molecular sieve adsorption tower, the depth of drying after the oxygen and nitrogen separation from the top of the adsorption tower. The gas is nitrogen with high purity. This process is completed by the two adsorption towers crossed, one work, one regeneration, and continuous preparation of nitrogen. This part of the nitrogen gas after high efficiency nitrogen dust collector into the nitrogen receive tank. Here, regeneration means, the adsorption tower gas will be discharged to the atmosphere and the pressure quickly reduced to atmospheric pressure, while the molecular sieve adsorption of oxygen, carbon dioxide and other release from the molecular sieve process.

CMS Series

PSA Molecular Nitrogen Generator

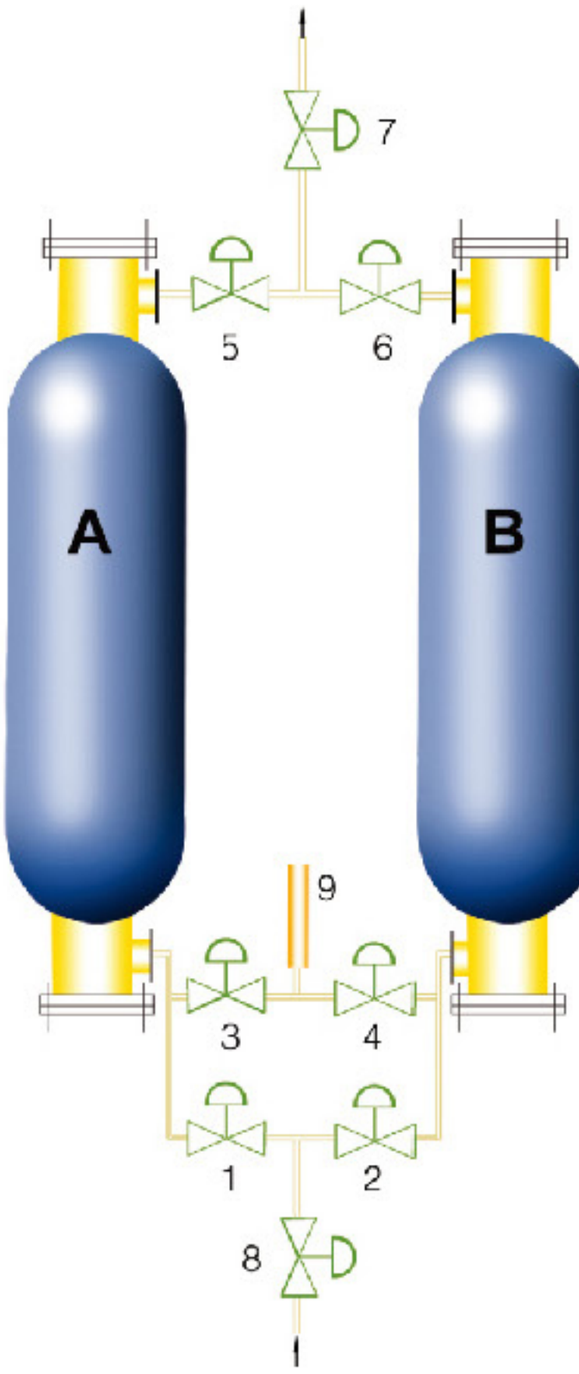
Food grade

System flowchart



Air compressor system

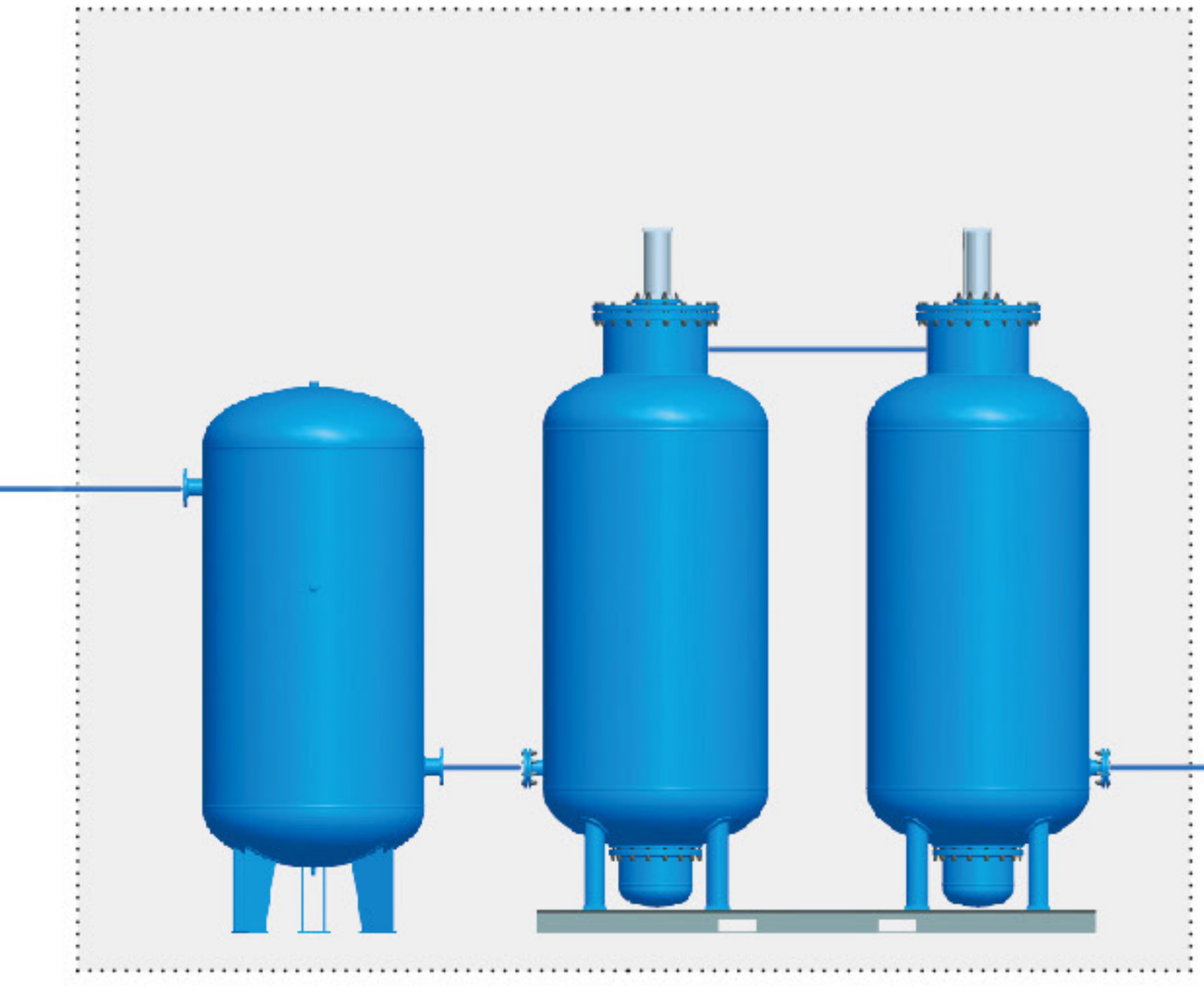
Compressed air purification system



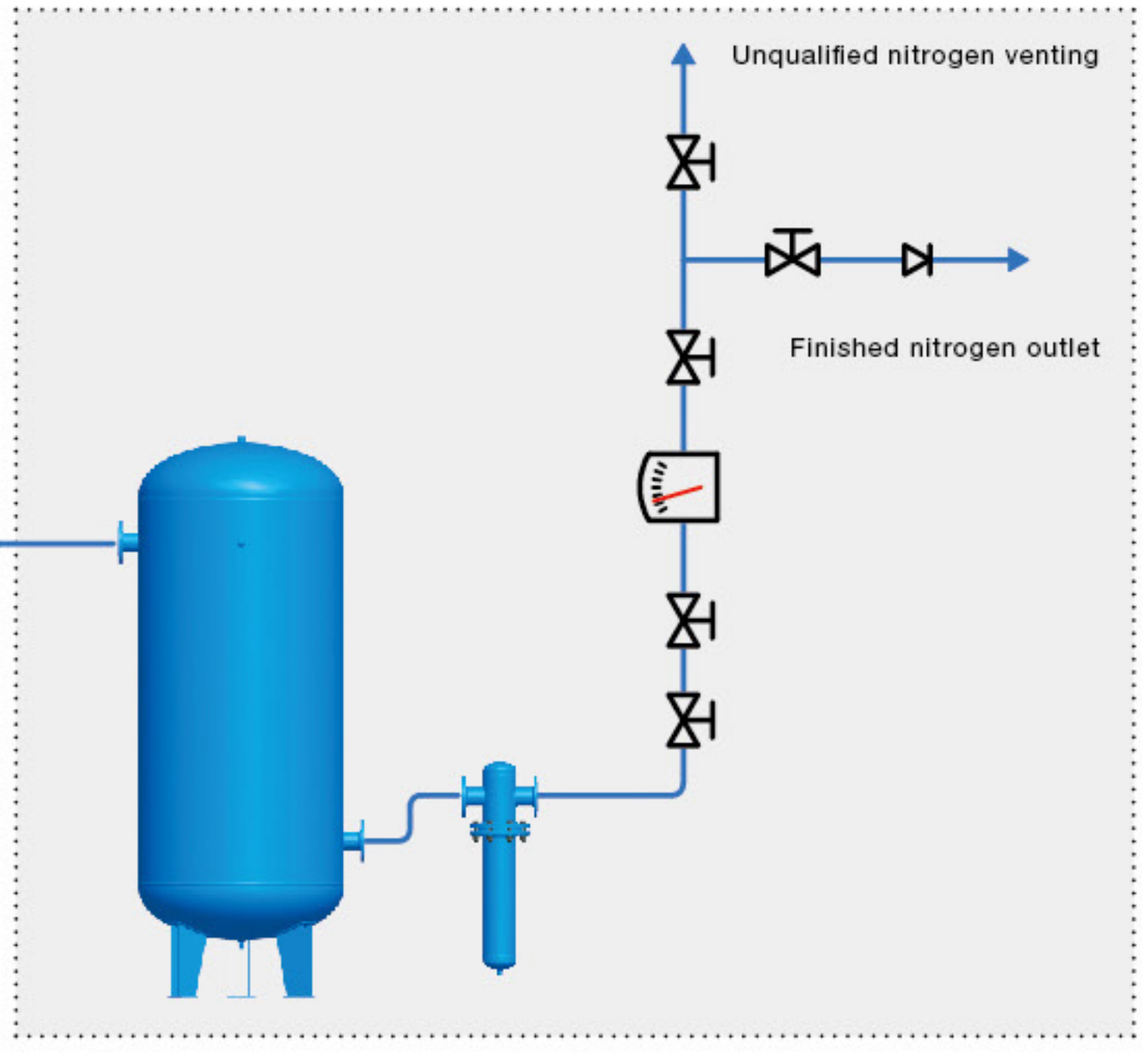
1. Tower A gas inlet Valve
2. Tower B gas inlet Valve
3. Tower A gas outlet empty Valve
4. Tower B gas outlet empty Valve
5. Tower A gas outlet Valve
6. Tower B gas outlet Valve
7. N_2 gas exhaust Valve
8. Air inlet Valve
9. Gas outlet silencer

Flow Process:

After air pretreatment, clean compressed air through the 1# valve to the 8 # valve into the A tower, after the A tower of the molecular sieve adsorption, through the 5# valve to the 7 # valve out of nitrogen, meanwhile the 4# valve open, B tower for regeneration. When the B tower regeneration is completed, switch to B tower adsorption, while A tower regeneration, followed by recycling.



PSA adsorption system



Nitrogen buffer system

CMS- ( ) 97 type

Nitrogen Purity: 97%

Specification model	Nitrogen production (Nm³/h)	Effective gas consumption (Nm³/min)	Inlet diameter (mm)	Outlet diameter (mm)	Host Length x width(mm)
CMS-10/97	10	0.4	15	15	850×420
CMS-20/97	20	0.8	25	15	850×420
CMS-30/97	30	1.2	25	15	1150×600
CMS-40/97	40	1.6	25	25	1150×600
CMS-50/97	50	2.0	32	25	1200×700
CMS-60/97	60	2.4	32	25	1250×880
CMS-80/97	80	3.2	40	25	1260×880
CMS-100/97	100	4.0	40	25	1350×950
CMS-150/97	150	6.0	50	32	1750×1000
CMS-200/97	200	8.0	50	32	2150×1100
CMS-300/97	300	12.0	65	40	2250×1140
CMS-400/97	400	16.0	65	40	2500×1150
CMS-500/97	500	20.0	80	50	2750×1450
CMS-600/97	600	24.0	80	50	2850×1550
CMS-800/97	800	32.0	100	65	3000×1650
CMS-1000/97	1000	40.0	100	65	3100×1700
CMS-1500/97	1500	60.0	125	80	3250×1820
CMS-2000/97	2000	80.0	150	100	3500×2150
CMS-3000/97	3000	120.0	200	100	4400×3150

CMS- ( ) 99 type

Nitrogen Purity: 99%

Specification model	Nitrogen production (Nm³/h)	Effective gas consumption (Nm³/min)	Inlet diameter (mm)	Outlet diameter (mm)	Host Length x width(mm)
CMS-10/99	10	0.46	15	15	850×420
CMS-20/99	20	0.95	25	15	1150×600
CMS-30/99	30	1.4	25	15	1150×600
CMS-40/99	40	1.9	25	25	1200×700
CMS-50/99	50	2.4	32	25	1250×880
CMS-60/99	60	2.8	32	25	1260×880
CMS-80/99	80	3.7	40	25	1350×950
CMS-100/99	100	4.6	40	25	1750×1000
CMS-150/99	150	7.1	50	32	2150×1100
CMS-200/99	200	9.4	50	32	2250×1140
CMS-300/99	300	14.1	65	40	2500×1150
CMS-400/99	400	19.0	65	40	2750×1450
CMS-500/99	500	24.5	80	50	2850×1550
CMS-600/99	600	28.0	80	50	3000×1650
CMS-800/99	800	39.3	100	65	3100×1700
CMS-1000/99	1000	49.1	100	65	3250×1820
CMS-1500/99	1500	73.6	125	80	3500×2150
CMS-2000/99	2000	93.4	150	100	3800×2450
CMS-3000/99	3000	140	200	100	4400×3150

CMS- ( ) 295 type

Nitrogen Purity: 99.5%

Specification model	Nitrogen production (Nm³/h)	Effective gas consumption (Nm³/min)	Inlet diameter (mm)	Outlet diameter (mm)	Host Length x width(mm)
CMS-10/295	10	0.5	15	15	850×420
CMS-20/295	20	1.0	25	15	1150×600
CMS-30/295	30	1.5	25	15	1200×700
CMS-40/295	40	2.0	25	25	1250×880
CMS-50/295	50	2.5	32	25	1260×880
CMS-60/295	60	3.0	32	25	1350×950
CMS-80/295	80	4.0	40	25	1750×1000
CMS-100/295	100	5.0	40	25	2150×1100
CMS-150-295	150	7.5	50	32	2250×1140
CMS-200/295	200	10.0	50	32	2500×1150
CMS-300/295	300	15.0	65	40	2750×1450
CMS-400/295	400	20.0	65	40	2850×1550
CMS-500/295	500	25.0	80	50	3000×1650
CMS-600/295	600	30.0	80	50	3100×1700
CMS-800/295	800	40.0	100	65	3250×1820
CMS-1000/295	1000	50.0	125	65	3500×2150
CMS-1500/295	1500	75.0	150	80	3800×2450
CMS-2000/295	2000	100.0	200	100	4400×3150
CMS-3000/295	3000	150.0	250	125	5100×3300

CMS- ( ) 39 type

Nitrogen Purity: 99.9%

Specification model	Nitrogen production (Nm³/h)	Effective gas consumption (Nm³/min)	Inlet diameter (mm)	Outlet diameter (mm)	Host Length x width(mm)
CMS-10/39	10	0.56	15	15	1150×600
CMS-20/39	20	1.1	25	15	1200×700
CMS-30/39	30	1.8	25	15	1250×880
CMS-40/39	40	2.3	25	25	1350×950
CMS-50/39	50	2.9	32	25	1750×1000
CMS-60/39	60	3.5	32	25	2150×1100
CMS-80/39	80	4.5	40	25	2250×1140
CMS-100/39	100	5.5	40	32	2250×1140
CMS-150/39	150	8.3	50	32	2500×1150
CMS-200/39	200	11.1	50	32	2750×1450
CMS-300/39	300	17.5	65	40	3000×1650
CMS-400/39	400	23.2	80	50	3100×1700
CMS-500/39	500	29.2	80	50	3250×1820
CMS-600/39	600	35.5	100	65	3500×2150
CMS-800-39	800	47.0	125	65	3500×2150
CMS-1000/39	1000	58.0	150	65	3800×2450
CMS-1500/39	1500	87.0	150	80	4400×3150
CMS-2000/39	2000	116.0	200	100	5100×3300
CMS-3000/39	3000	240	300	200	4400×4400

CMS- ( ) 49 type

Nitrogen Purity: 99.99%

Specification model	Nitrogen production (Nm³/h)	Effective gas consumption (Nm³/min)	Inlet diameter (mm)	Outlet diameter (mm)	Host Length x width(mm)
CMS-5-49	5	0.5	15	15	1150×600
CMS-10-49	10	1.0	15	15	1150×600
CMS-20-49	20	2.0	25	15	1260×880
CMS-30-49	30	3.0	32	15	1750×1000
CMS-40-49	40	4.0	40	20	1750×1000
CMS-50-49	50	5.0	40	20	2150×1100
CMS-60-49	60	6.0	50	20	2250×1140
CMS-80-49	80	8.0	50	25	2250×1140
CMS-100-49	100	10.0	50	25	2500×1150
CMS-150-49	150	15.0	65	25	2750×1450
CMS-200-49	200	20.0	80	30	2850×1550
CMS-300-49	300	30.0	80	40	3100×1700
CMS-400-49	400	40.0	100	50	3250×1820
CMS-500-49	500	50.0	125	50	3500×2150
CMS-600-49	600	60.0	125	65	3800×2450
CMS-800-49	800	80.0	150	65	3800×2450
CMS-1000-49	1000	100.0	200	80	4400×3150

CMS- ( ) 59 type

Nitrogen Purity: 99.999%

Specification model	Nitrogen production (Nm³/h)	Effective gas consumption (Nm³/min)	Inlet diameter (mm)	Outlet diameter (mm)	Host Length x width(mm)
CMS-5/59	5	0.6	25	15	1150×600
CMS-10/59	10	1.1	25	15	1250×880
CMS-20/59	20	2.2	40	15	1750×1000
CMS-30/59	30	3.3	40	25	2150×1100
CMS-40/59	40	4.4	50	25	2250×1140
CMS-50/59	50	5.5	50	25	2500×1150
CMS-60/59	60	7.1	50	25	2750×1450
CMS-80/59	80	8.8	65	32	2750×1450
CMS-100/59	100	11	65	32	2850×1550
CMS-200/59	200	22	65	32	3250×1820
CMS-300/59	300	43	80	40	3500×2150

NOTE: This table lists data feed air to 0.8Mpa (gauge), 20°C ambient temperature, 0 meters elevation and 80% relative humidity for design basis. When choosing the air compressor, should pay attention to the actual volume of gas production and load rate of air compressor, generally in accordance with the standard 120% to do the selection.

The sample provided data for reference only, the Company reserves the right, in its sole right to change product design. Details to provide design drawings shall prevail For more information, please contact our sales department.

ZMS Series

PSA Molecular Oxygen Generator

Product Range

- O_2 Volume : 0.5~2000Nm³/h
- O_2 Purity : 30~93%(±1%)
- O_2 Dew Point : -50℃

PSA Oxygen Generator:

Uses special molecular sieve to absorb the N_2, CO_2, H_2O and other impurities form raw materials compressed air, in order to obtain high purity oxygen. It consists of two or more adsorption tower, PLC control system, respectively work with the charge, adsorption, regeneration, washing and other processes to achieve continuous gas supply.

Application:

It is widely used in petrochemical, light industry, metallurgy, environmental protection, building materials, aquaculture, biotechnology, medical fields.

System flowchart