

Activated Industrial Oxygen Generator Manufacturers Mining Brazing Buring

Basic Information

Place of Origin: SUZHOU, CHINABrand Name: SUMAIRUI GAS

• Certification: ISO9001, CE, BV, SGS, TUV, ASME,

GOST,NB,NR ETC

Model Number: OSO
Minimum Order Quantity: 1 set
Price: Negotiable

Packaging Details: Exporting wooden case /Film packing

Delivery Time: 30-45 days

Payment Terms:
 L/C, T/T, Western Union, MoneyGram

Supply Ability: 100 sets/months



Product Specification

Material: Mild Steel/Stainless Steel

Purity: 93%-95%Pressure: 3-5 Bar

Capacity: 10-1000Nm3/hrType: Plug And Play

Twin Adsorbers: Yes
Customized: Available
PLC: S7-1200
HMI: 7inches

• Voltage: 220-575V 50Hz/60Hz

• Certificates: CE, ISO, ASME, GOST, KGS, NB Etc

Color: CustomizedSize: As Per Actual Size

Highlight: industrial oxygen generator manufacturers,

activated oxygen generator,

Product Description

OSO Oxygen generator used for Various different forms of mining with the brazing/buring purpose

Oxygen generators separate oxygen from air so that the gas can be fed into industrial processes in real-time or stored in pressure tanks. Oxygen generators are used in dozens of industrial applications ranging from gold mining to aquaculture to life support.

Normal ambient air is made up of 78% nitrogen, 21% oxygen and other trace gases like argon and CO2. In order to remove the nitrogen and trace gases, an oxygen generator is used.

The smallest oxygen generators are no larger than a soda can, while industrial oxygen generators can fill a room. However, all oxygen generators have the same purpose: to provide a safe supply of concentrated oxygen gas.

Businesses who need bulk oxygen gas often start by purchasing tanks of the gas from other companies who fill those tanks using an industrial oxygen generator. If their need for pure oxygen is large and ongoing, it may be cost-effective to purchase their own oxygen generator system and produce oxygen on site. While the up-front cost of the machinery is significant, the cost per cubic foot of oxygen generated is 1/3 to 1/2 that of purchasing bulk oxygen, so over time, the oxygen generator can pay for itself.

One example of this is hospitals that pipe oxygen into patient rooms. Instead of using bottled oxygen, most hospitals have one or more industrial oxygen generators in the building. A system of pressurized pipes are used to flow oxygen to each room.

Types of Oxygen Generators

Pressure Swing Adsorption Oxygen Generator

Pressure Swing Adsorption (PSA) is the most common method of producing oxygen at an industrial scale. PSA generators separate nitrogen from ambient air inside a pressurized tank filled with Zeolite. Zeolite is a natural or man-made mineral that acts as a "molecular sieve." It is this ability to "sort" molecules by size that makes zeolite so useful. The larger nitrogen molecules are adsorbed by the sieve material while the smaller oxygen molecules drift past and are collected. Pressure is then released, the nitrogen molecules are vented to the atmosphere, and the tank is pressurized again.

Using PSA will result in 90-95% oxygenated gas. Further refinement can be achieved by repeating the process until over 99% "pure" oxygen is generated.

As a side note, the PSA process can also be used to generate nitrogen by collecting the nitrogen molecules and venting the oxygen. PSA is also used in the large-scale commercial synthesis of hydrogen used in oil refineries and in the production of ammonia for fertilizer.

One special kind of oxygen generator is more commonly known as an oxygen concentrator which is used as an alternative to oxygen bottles for home health care. While the up-front cost of the machine is more expensive than oxygen cylinders, they are safer than bottled oxygen and over time less expensive than having oxygen tanks delivered to the home.

Oxygen concentrators are normally sold through medical supply houses and can be purchased with a prescription from a physician.

Model	Capacity (Nm3/hr)	Purity	Outlet pressure (Mpa)	Inlet (mm)	Outlet (mm)	Dimensions L*W*H (mm)	Weight (KG)
OSO5	5			DN20	DN10	1350*1200*18 00	1
OSO10	10			DN25	DN15	1800*1250*22 00	1200
OSO15	15			DN25	DN15	2100*1450*22 00	1500
OSO20	20			DN40	DN25	2300*1550*24 50	1
OSO30	30			DN40	DN25	2450*1650*25 50	l
OSO35	35			DN50	DN25	2650*1900*25 50	1
OSO40	40			DN50	DN25	2800*2200*26 00	1
OSO50	50			DN50	DN25	3100*2450*27 00	1
OSO60	60			DN65	DN40	3300*2600*29 00	2550
OSO80	80	93±3%	0.2-0.4 Mpa	DN80	DN50	100	3300
OSO100	100			DN80	DN50	3850*3100*33 00	l
OSO150	150			DN100	DN65	4100*3300*34 50	5100
						1	

OSO200	200		DN125		4600*3550*35 00	
OSO250	250		DN125		5500*3900*39 00	
OSO300	300		DN150	DN100	5800*4200*39 80	10500

Design reference:

Compressed air inlet pressure 7.5 bar(g)/108 psi(g) Air quality 1.4.1 according to ISO 8573-1:2010 Oxygen outlet pressure 2-4 bar(g)/58psi(g)
Oxygen quality 1.2.1 according to ISO 8573-1:2010.
Designed working temperature max 50 °C
Dew point at Oxygen outlet - 50 °C

Notes:

Following request of oxygen generator will be customized : Oxygen outlet pressure >4 bar(g)/58 psi(g)
Filling cylinders 150 bar(g)/200 bar(g)/300 bar(g)
Dew point < - 50 °C
Movable/containerized , plug and play Other special requirements as per site conditions





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