



CATALOG OF S-SPSA OXYGEN GENERATOR MODELS

Mentis[®] Engineering

MECHANICAL & CHEMICAL CO. LTD.

"EFFECTIVE AND RELIABLE SOLUTIONS"

Contact us at www.mentismedikal.com





Mentis[®] MP25 - OXYGEN GENERATING AND CYLINDER FILLING CONTAINER PLANTS

Mentis Mobile Oxygen Generating and Cylinder Filling Plants

You will be able to produce your own oxygen gas according to your requirements with the Mentis MP25 series. When electricity is supplied, these dependable compact plants can provide 11Nm³ per hour oxygen gas at 95% oxygen concentration up to 6 bar oxygen gas outlet pressure and also 9Nm³/hour cylinder filling station at 150 bar filling pressure.

How PSA Works?

Air contains 21% Oxygen, 78% Nitrogen, 0.9% Argon, and 0.1% other trace gases. Mentis S-PSA Oxygen Generation Systems separate this oxygen from Compressed Air through a unique process called Pressure Swing Adsorption. (PSA). The Pressure Swing Adsorption process for the generation of enriched oxygen gas from ambient air utilizes the ability of a synthetic Zeolite Molecular Sieve to absorb mainly nitrogen. While nitrogen concentrates in the pore system of the Zeolite, Oxygen Gas is produced as a product.

How Mentis Serial - PSA Works?

"Management of Atmospheric Contamination Movement"

This is the most distinctive feature that distinguishes our technology from other PSA oxygen and nitrogen generating technologies.

Compressed air is a source of many contaminations while compressing. We are sure that; Pressurized air coming from compressors is not suitable for the separation process yet. That's why, pressurized air must be cleaned, separated until free from contaminants completely. S-PSA technology is composed of two-stage PSA cycles.

The first stage cycle is purifier the compressed air from all contaminations and unwanted gaseous. The second stage cycle is just separating to product gas from other gaseous. This process is developed by Mentis Engineering Company for long life and high purity air separation technique.

Oxygen Applications

- Hospitals
- Metal Cutting
- Gold Mining
- Fish Farms
- Ozone Systems
- Oxygen Source
- Glass Industry
- Chemical Processes

Advantages of Mentis MP25 SERIES

Cost Reduction

Oxygen production from compressed air with Mentis S-PSA Oxygen Generator eliminates the cost of the unabated tube or liquid gas, rent, filling costs, purchase procedure.

Non-Stop Gas Supply

Mentis S-PSA Oxygen Generator produces 24 hours of continuous gas as long as it is needed. wherever you want.

True & Reliable Purity

Mentis S-PSA Oxygen Generators can produce oxygen gas according to the purity required by your application. Don't pay more for high purity.

Safety

Mentis S-PSA Oxygen Generator Eliminates the danger of storing, transporting, and handling heavy and high-pressure tubes.

Product Gas Quality

Mentis S-PSA Oxygen Generator provides you with product quality certified by national and international organizations. Product quality can be continuously monitored and repeated accuracy.

Features

- Produces High-Quality Oxygen Gas with Consuming only a Small Amount of Electricity
- Low operating cost (0.7kW per 1m³ Oxygen gas product)
- Maximum Efficiency with 10 years planned service life
- Plug & Play Design
- Small Footprint
- PLC Microprocessor controlled (Siemens Control Unit)
- Colored Touch Screen Control Panel
- Zirconia Oxygen Sensor for exact oxygen purity
- Automatic and Unattended Operation
- Easy to Installation and Maintenance
- Integrated Own Zero Lose Desiccant Dryer System
- Volumetric Product Oxygen Gas Control System
- Remote Access via Ethernet Connection

Standards Compliance

- EN ISO 7386-1
- European pharmacopoeia
- HTM 02-01
- ISO 9001:2015
- ISO 13485:2016
- 93/42 EEC

Mentis MP25 Series Medical & Industrial Oxygen Generators and Cylinder Filling Plants

MP25 Oxygen Generating Plants Produces 11Nm³ of gaseous oxygen per hour at 95% +/-1% oxygen concentration up to 6 bar oxygen gas outlet pressure and also with the flow of 9Nm³/hour cylinder filling station at 150 bar filling pressure. with a very small amount of pressured air.

Specifications

Designed Product Flow: 11Nm³/hr Oxygen Gas (180LPM)
 Product Purity: 95% ±1% Oxygen Gas Concentration
 Product Pressure: 6 Bar
 Required Compressed Air Flow: 3.7m³ per minute at 7.5 bar(g)
 Cylinder Filling Flow: 9Nm³/hour
 Cylinder Filling Pressure: 150 bar

Product Characteristics:

Product Dew Point: -73°C
 Water content : <67 ppm
 CO : < 2 pm
 CO₂ : < 150 ppm
 SO₂ : 0 ppm
 NO_x : 0 ppm

Physical Connections:

Dimensions (W x L x H) : 20FT ISO Container Standards
 Weight: 4200 Kg
 Compressed Air Inlet: 1"
 Product Gas Outlet: 3/4"

Ambient Operating Conditions:

Locate the compact oxygen generator in a well-ventilated area that is protected from weather elements and remains between 4°C and 40°C

Power Requirements :

220 V ~ 50/60 Hz, 22kW (Three Phase)
 Touchscreen (colored) with PLC: Siemens HMI
 Oxygen Analyser: On Screen Zirconia Oxygen Sensor

Commodity Classification Number:

Industrial: 8421.39.8040
 Medical: 9019.2.0000

Terms of Warranty: 2 Years

Including 2 years Spare Parts, Installation, and Training

Planned Service Life: 10 Years

10 years of service and spare parts supply

Note: An unprotected or inadequately ventilated environment or improper control power may cause damage to the oxygen generator not covered under warranty.



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