

NEEN

MEDICAL OXYGEN GENERATOR





Benefits

- Security and Guarantee of Supply:
- Designed to meet the rigorous demands of the healthcare industry, OGEN ensures an uninterrupted supply of oxygen, providing peace of mind for professionals and the necessary confidence for patients.
- Flow Capacities:
- With operation from 5 to 150 m³/h, the equipment offers the ideal versatility for environments of different sizes, maintaining efficiency even under high demands.
- Energy Efficiency:
- Integrating Valmig's Smart Cycle technology with variable speed air compressors, OGEN produces oxygen with an energy consumption of only ~0.7Kwh/M³, promoting an economical and sustainable operation.
- Intelligent Monitoring:
- Its advanced telemetry technology allows monitoring the performance of the equipment remotely, enabling precise interventions and optimizing preventive maintenance, which reduces costs and increases operational safety.
- Versatility of Use:
- Adaptable to customer needs, OGEN can be installed in rooms, open metal skids or weather-resistant containers, ensuring flexibility for any infrastructure.

Transform healthcare with the confidence and innovation that only OGEN can offer a complete solution for a safe, efficient and adaptable supply to the demands of the present and the future.

Technical Features

- Technology: PSA (Pressure Swing Adsorption)
- Control Panel:
 - Valmig controller and Smart Cycle system
 - 4.3" Touch Screen (7" & 10" Option)
 - Oxygen Analyzer: Zirconia Oxide or Paramagnetic
 - Sensors: Dew Point, CO, CO₂, Mass Flow Meter
 - Communication: Ethernet Modbus / Telemetry (www.telemetria.valmig.com)
 - Purity: 93~96%
 - Automatic protection system in case of purity failures.
 - Flow rate: 5 to 54.5 m³/h
 - For higher flow rates, modular systems can be mounted
 - Stainless steel angle pneumatic valves designed for 1,000,000 cycles
 - 304 stainless steel piping
 - Air inlet filter system composed of: Coalescing Filters S (0.01 Micron) + Activated Carbon Filter (A)
 - Air Inlet Pressure Regulator

Standard Models

O2 Purity	Model	O2 Flow @6BAR		Air Comsumption	Reccomended Compressor	Reservoir (L)	
		N l/min	N M³/h	NM³/h@8BAR		Air	O2
93~96%	OGEN-5	100.0	6.0	67.5	VLS-10-VSD	300	300
	OGEN-10	209.1	12.5	141.1	VLS-20-VSD	300	300
	OGEN-20	345.5	20.7	233.2	VLS-30-VSD	500	500
	OGEN-30	472.7	30.4	319.1	VLS-40-VSD	500	500
	OGEN-35	590.9	35.5	398.9	VLS-50-VSD	1000	1000
	OGEN-40	681.8	40.9	460.2	VLS-60-VSD	1000	2x1000
	OGEN-50	909.1	54.5	613.6	VLS-75-VSD	1000	2x 1000

Standard Flowchart



Oxygen cylinder filling Flowchart



Assembly Styles

CTN - CONTAINER IP55



Assembled in a closed container with IP55 certification, this type of assembly is recommended for users who do not have a specific location to install the oxygen generator. In addition to facilitating installation, protecting the equipment against the weather and reducing noise.

SM/SMC - STACK MOUNT



Assembled on a modular metal base (SM), also with noise enclosure (SMC) available. This type of assembly is recommended for customers who already have a specific room for installing the generator and want the ease of installing the plug&play system.

RA - ROOM ASSEMBLY



The room assembly type is recommended for customers who already have a room designed for the installation of the oxygen generator. All components are pre-assembled at Valmig, facilitating installation. This type may require a specific design and inclusion of exhaust systems.

OGEN - Part Number Configurator

Series	Technology		Flow Rate		Configuration		Power (HP)		Compressor Configuration		Compressor Type		Air Tank (L)		Oxygen Tank (L)		Assembly Style		Control Panel Type		Voltage		Frequency		Standard		Options	
OGEN	PSA	PSA	5	5m³/h	1	Simplex	10HP	10	1	Simplex	STD.OF	Oilfree Screw	250L	250	250L	250	SM	Stack Mount	B	Basic - Analog Panel	220T	220 Volts 3PH	50Hz	50 Hz	NBR	NBR 13.587	IOT	Telemetry Modem 4G
	VSA	VSA	10	10m³/h	2	Duplex	20HP	20	2	Duplex	STD.LB	Lubricated Screw	350L	350	350L	350	SMC	Enclosed Stack Mount	P	Premium - Touch Screen 7"	380T	380 Volts 3PH	60Hz	60 Hz	NFPA	NFPA 99	VSD	Variable Speed Driver
	VPSA	VPSA	20	20m³/h	3	Triplex	30HP	30	3	Triplex	SCR.OF	Oilfree Scroll	500L	500	500L	500	RA	Room Assembly			415T	415 Volts 3PH					O2P	Paramagnetic Oxygen Analyzer
			30	30m³/h	4	Quadplex	40HP	40	4	Quadplex			1000L	1000	1000L	1000	CTN	Container IP55			440T	440 Volts 3PH					FMD	Massic Flowmeter - Digital
			35	35m³/h			50HP	50																			FMA	Analogic Flowmeter
			40	40m³/h			60HP	60																			QCV	Quality Control Valve
			50	50m³/h			75HP	75																			IDP	Inlet Dew point Sensor
			75	75m³/h			100HP	100																			ODP	Outlet Dew point Sensor
			100	100m³/h																							CO	CO 0-5ppm Sensor
																											CO2	CO2 0-500ppm Sensor
																											BAC	Bacteriological SS Outlet Filter
																											TCV	Activated Carbon Tower
																											WOS	Water and water separator

Example of part number:

OGEN-PSA-10-1-20HP2-STD.LB-350L-350L-SM-P-220T-60Hz-NFPA-VSD-FMD-QCV-BAC

Medical Oxygen Generator

Technology: PSA (Pressure Swing Adsorption)

Flow Rate: 12,5 M³/h @ 6-7 bar @ 93-96% purity

Compressor power: 20 HP (Each)

Compressor Configuration: Duplex

Compressor Type: Lubricated Screw Compressor

Air Tank: 350 Liters

Oxygen Tank: 350 Liters

Assembly Style: Stack Mount - Open Metal Skid

Control Panel: Premium type - 7" Touch Screen

Voltage: 220 Volts - 3PH - 60 Hertz

Standard: NFPA99

Optionals:

VSD: Variable Speed driver compressor

FMD:Massic type digital flowmeter

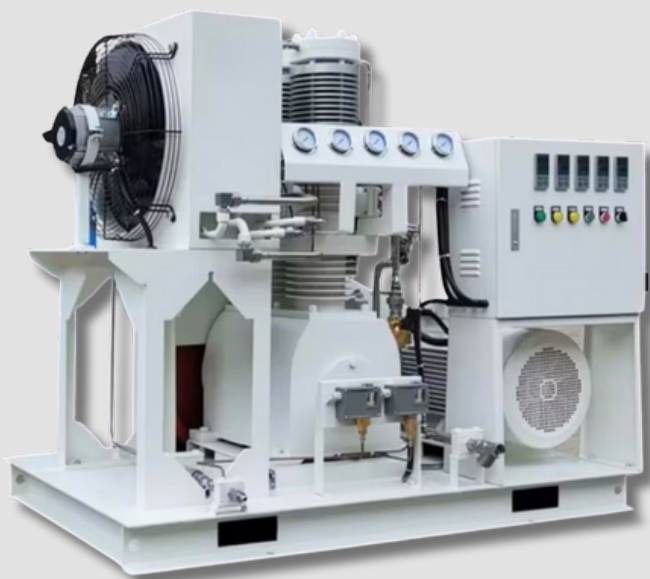
QCV: Quality control valve (Cuts off the flow rate if purity is not according to specified)

BAC: Bacteriological Stainless Steel Sterile Filter

BMZ

OXYGEN FILLING BOOSTER





Features and Benefits

- 100% Oilfree Piston type booster
- Oxygen Compatible materials
- 3 and 4 stage configurations
- Filling capacity: 5 up to 100 M³/h
- Max Filling pressure: 150, 200 or 300 BAR
- Heavy duty air ventilation allows 24/7 operation
- Automated control panel
 - Automatic inlet pressure set
 - Automatic filling pressure set
 - Temperature monitor for each stage with limit alarm
 - Maintenance alarm
 - Multiple filling pressure set
- Inlet filter
- Stainless steel pipeline and valves
- Calibrated safety relief valve for each stage
- Easy maintenance
- Option for cylinder filling manifold: 2 cylinders up to 50 Cylinders

Enhance Your Hospital's Autonomy with the Valmig O2B Oxygen Filling Booster

The Valmig O2B Oxygen Filling Booster significantly increases a hospital's autonomy by enabling on-site oxygen generation and efficient cylinder filling. When combined with a Valmig Oxygen Generator, it expands the system's capabilities to fill backup cylinders, supply portable oxygen for patient transport, and support decentralized oxygen distribution. This integrated solution ensures a reliable and independent oxygen supply, reducing dependence on external deliveries and enhancing operational resilience.

O2B - Part Number Configurator

Series	Power/Stages		Flow Rate	Max Filling Pressure		Cylinder Filling positions		Voltage		Frquency	
O2B	5/3	5HP / 3 Stage	5m ³ /h	150	150 BAR	2P	2	220T	220 Volts Trifásico	50Hz	50 Hertz
	10/3	10HP / 3 Stage	10m ³ /h	200	200 BAR	4P	4	380T	380 Volts Trifásico	60Hz	60 Hertz
	15/3	15HP / 3 Stage	15m ³ /h	300	300 BAR	10P	10	415T	415 Volts Trifásico		
	5/4	5HP / 4 Stage	5m ³ /h			20P	20	440T	440 Volts Trifásico		
	10/4	10HP / 4 Stage	10m ³ /h			30P	30				
	15/4	15HP / 4 Stage	15m ³ /h			40P	40				
	20/4	20HP / 4 Stage	20m ³ /h			50P	50				
	30/4	30HP / 4 Stage	30m ³ /h								
	50/4	50HP / 4 Stage	50m ³ /h								
	100/4	100HP / 4 Stage	100m ³ /h								

Example of part number:

O2B-10/3-200-4-220T-60HZ

Oxygen Cylinder Filling Booster

Power: 10HP

Stages: 3 Piston

Filling speed (Flow Capacity): 10m³/h @ Max Pressure

Filling manifold: 4 positions

Voltage: 220 Volts 3Ph - 60Hz

Since 1985, Valmig has been delivering the most reliable and advanced medical gas solutions. With over **1,000 hospitals** served across more than **20 countries**, we are a trusted partner in healthcare worldwide



CERTIFICATIONS:



AFE ANVISA certificate of good manufacturing practices for hospital medical equipment.



Productive process certification for norms: NBR 12.188:2016 - Centralized supply systems for medical devices and vacuum for use in healthcare services. NBR 13.587:2017 - oxygen concentrator system for use in centralized medical oxygen system.



Pannel fabrication certification of ul control and automation UL.



Productive process certification for norms: ISO 7396-1:2016 - Medical gas pipeline systems - Pipelines for compressed medical gases and vacuum.



Productive process for pressure storage certified for norms: ASME VII - Pressure Vessels - DIV:2019



Productive process fcertificated for norms: NFPA99:2018 - Health Care Facilities Code.



MEDICAL GAS SOLUTIONS



OGEN
Medical Oxygen
Systems



AIRMED
Medical Air
Systems



ASPMIG
Medical Vacuum
Systems



Manifolds and
pipeline
equipaments



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