

# **ULTRA CONTROL**

# **ULTRAOX ST®**



ULTRAOX®  
Medical Oxygen Supply System

Made in Portugal

# ULTRAOX

## ULTRAOX® ST Plants

ULTRAOX® ST medical oxygen plants are designed to deliver high purity oxygen for medical use according to the European and American Pharmacopoeia parameters. The production of medical oxygen is carried out on site, via an oxygen concentrator integrated in the ULTRAOX® ST plant, thereby ensuring drastic savings in annual costs with oxygen supplied to the hospital network. The ULTRAOX® ST plant provides a continuous supply of medical oxygen with a purity of 94 % (+/- 1%), and is equipped with safety devices that ensures constant high purity. With this, ULTRAOX® ST guarantees total safety in the use of medical oxygen by hospital staff.

## Turnkey systems and special executions

Due to the vast experience in the medical gas sector, we are able to supply an oxygen production system in compact versions, including modular systems.

## Regulation

The ULTRAOX® ST oxygen production plants are certified as medical devices, class IIb, and comply with the requirements of the international standard ISO 10083. Its design and manufacture meet the requirements of the implemented Quality Management System to ISO 13485.

## THE SMART CHOICE

### Modular Construction

The ULTRAOX® ST oxygen production plants can be built according to the physical space available. Depending on the characteristics of each use, we have designed the most compatible cost/benefit ratio production system. The systems run fully automatic. Switching between the compressors and the start-up of the generators, in a cascaded way, ensures a continuous supply of oxygen to the hospital network or for the filling station.

### Basic Configuration

- 1 or more high quality screw compressors ULTRASCREW;
- 1 or 2 or more compressed air treatment chains;
- 1 or more air tanks;
- 1 or more oxygen concentrators ULTRACON;
- 1 or more oxygen tanks;
- 1 set of valves and safety devices for a good and long lasting operation of the equipment.



### Simplified and Secure Mounting

The medical oxygen production plants ULTRAOX® are factory pre-electrified and if requested, can be totally interconnected. Therefore, installation or assembling on site will become very simple. The equipment is parameterized and tested in the factory and will be ready to start. In large plants, the installation, initial start-up and training of personnel, is supervised by factory technicians.

### Compatibility

The system is designed in such way that one can keep the existing installation and connect the ULTRAOX® SC unit as if it was a new source of oxygen supply, following a few simple procedures.

Besides, with the ULTRAOX® plant, one can also establish its own autonomy of continuous supply of medical oxygen as it is being done with other medical gas supply systems (medical air supply system, medical vacuum system).



Oxygen quality in accordance with the European Pharmacopeia	
Purity of the O2	94% +/- 1%
Particles	< 1 µm
CO2	< 300 ppm
CO	< 5 ppm
SO2	< 1 ppm
NO2	< 2 ppm
Working dew point	- 46 ° C
Tastes and smells	Exempt
Residual contents in initial operation conditions.	

## ADVANTAGES

Lower energy consumption;  
 Higher oxygen pressure availability;  
 Expandable without the need of concentrator replacement;  
 Few service parts and very easy maintenance;  
 Long life cycle before overhauling;

*Complete range of products and accessories for medical gas installations*

Digital Oxygen flow-meters

Oxygen purity controllers

Complementary information control box for Building Management Systems (BMS)

High pressure compressors for filling cylinders station

High pressure cylinders and valves

Accessories for medical gas pipeline systems including: medical gas outlets, second stage regulators, valves, automatic changeovers, line regulators, pressure and temperature sensors

Accessories for oxygen therapy, suction lines and anesthetic gases, flow regulators and pressure regulators, vacuum regulators, junction jars, pressure regulators, suction kits, disposables.

## ULTRAOX® ST CONTAINER



Also get to know the state-of-art:

ULTRAAR® totally oil-free medical airplants

ULTRAVAC® medical vacuum systems

ULTRASEG® AGSS systems

# RAISING THE STANDARDS OF QUALITY IN MEDICAL GASES

MODEL	CAPACITY O2		COMPRESSOR*	INLET PRESSURE (AC) BAR	OUTPUT PRESSURE (O2) BAR	ULTRACON
	l/min	m3/h				
3	5,3	0,32	2,2	7,5	6	1
8	13	0,78	2,2	7,5	6	2
12	17,9	1,1	4	7,5	6	3
30	51,7	3,1	5,5	7,5	6	4
50	76,7	4,6	7,5	7,5	6	5
70	108,3	6,5	11	7,5	6	6
90	133,3	8	11	7,5	6	7
100	158,3	9,5	15	7,5	6	8
120	206,7	12,4	15	7,5	6	9
180	303,3	18,2	22	7,5	6	10
260	436,7	26,2	30	7,5	6	11
370	608,3	36,5	37	7,5	6	12
440	725	43,5	55	7,5	6	13
520	873,4	52,4	60	7,5	6	11D
560	928,3	55,7	75	7,5	6	14
730	1216,6	73	75	7,5	6	15
820	1367	82,4	110	7,5	6	16
1120	1856,6	111,4	150	7,5	6	17
1640	2734	164	220	7,5	6	18

The above table indicates oxygen reference flow only. For accurate values and detailed technical parameters, please refer to the corresponding equipment technical data sheet.

\*The power and pressure of the compressor can vary depending on the service conditions required for the facility.

To calculate and select the right medical oxygen plant for your hospital needs, please send a request to our Engineering Division:

[international@ultra-controlo.com](mailto:international@ultra-controlo.com)



Tel. +351 21 915 4350  
[international@ultra-controlo.com](mailto:international@ultra-controlo.com)  
[ultracontrolo.com](http://ultracontrolo.com)

**ULTRA CONTROLO**