



GAS GENERATORS

Gas generators produced by Meta-Chrom company are modern high-tech equipment required to supply with gases chromatographs and other equipment. Types of generators produced by our company:

- Hydrogen generators
- Water purification systems
- Air compressors

Hydrogen generators — have a 4-stage gas cleaning system. They make it possible to significantly reduce the use of balloon gases for gas supply of the equipment. Significantly increase the sensitivity of analytical instruments.

Water purification devices — designed for the preparation of highly pure water, without which impossible the operation that require deionized water like hydrogen generators, sample preparation, HPLC, electrophoresis and analyzers.

Air Compressors — supply analytical equipment with clean air. They allow to increase the sensitivity of chromatographs and the accuracy of the analysis results.

Without exception, all Meta-Chrom gas generators are distinguished by their impeccable quality and reliability.

HYDROGEN GENERATOR HG (7, 16, 25L)

The Meta-chrome company produce generators of the HG and HG-HP series, which are used to provide hydrogen to flame chromatographic detectors. HG is a standard hydrogen generator (purity of hydrogen is 99.995%) and HG-HP (purity of hydrogen is 99.999%) is a high purity hydrogen generator. The maximum outlet pressure is 4 atm (6 atm on request).

The products comply with all the requirements of the current regulatory documentation, which is confirmed by a certificates.

PROPERTIES OF THE HYDROGEN GENERATOR HG AND HG-HP SERIES 7, 16, 25.

The HG-HP generator can be used as a source of carrier gas, since it is equipped with an additional gas purification system. This device is especially relevant when for some reason helium is not available to the consumer to work with a thermal conductivity detector - TCD. The hydrogen generator is equipped with its own microprocessor, with which you can control the operating modes of the device. It is microprocessor control that determines the autonomy of the device. In addition, this allows you to control the main technical parameters of the device (pressure, flow rate, level of water poured into the tank, presence of leaks in the gas lines, electrolyzer current). For the manufacture of gas lines, exclusively inert materials are used.

FEATURES OF HG AND HG-HP GENERATORS

- Microprocessor control.
- Multi-stage gas purification system.
- High efficiency of the power source of the electrolyzer provides a decrease of heat generation.
- Automatic overflow, which eliminates pressure collapses.
- Protection for exceeding the values of the electrolyzer current and hydrogen pressure.
- Extension of the life of the electrolyzer is ensured by adjusting the hydrogen capacity.
- Ability to control the temperature regime of the oxygen afterburner.
- Indication of hydrogen moisture allows to exclude the ingress of moisture into the consumer's lines.

The generators are equipped with LCD displays, on which the main parameters are identified: indicators of the set and output pressure, the value of the electrolyzer current, the level of hydrogen consumption, the temperature of the afterburner.



HYDROGEN GENERATORS (75 L)

The generators do not have a supply of hydrogen that could instantly fill a laboratory room or a chromatograph, and its performance will not allow creating an explosive concentration of a substance in the room, which guarantees the safety of research.

FEATURES OF HYDROGEN GENERATOR 75L:

- gas purification -system
- microprocessor control
- reduction of heat generation and increase in reliability due to the use of a high-efficiency electrolyzer power source
- protection against overpressure of hydrogen and overcurrent of the electrolyzer
- increasing the service life of the electrolyzer by regulating the hydrogen productivity
- preventing the ingress of moisture into the consumer's lines through the use of control and indication of the water level.

The liquid crystal displays of the equipment are equipped with the function of indicating the main parameters:

- outlet pressure
- electrolyzer current
- hydrogen consumption

Control and input of parameters is carried out from a 4-button keyboard. The hydrogen generator makes it possible to significantly reduce, and in most cases completely abandon the use of balloon gases for powering chromatographs.

The HG-75-O2 hydrogen generator provides additional oxygen production for welding. It can also be equipped with a burner.

Electric power is supplied from a single-phase AC network with a voltage of 187 to 242 V, a frequency of (50 ± 1) Hz, the operating mode is continuous.

The device is powered by bidistilled water with a specific electrical resistance of at least $1 \text{ M}\Omega \times \text{cm}$.



AIR COMPRESSORS "META-CHROME"

Air compressors are used for milder air quality requirements. however, like clean air generators, they can also be used to power chromatographic and other analytical equipment. The range of the company includes compressors of various capacities: for supplying air from several analytical instruments to an entire laboratory.

FEATURES OF AIR COMPRESSORS "META-CHROME"

- low noise level
- ease of use
- no need for maintenance
- built-in filtration system
- high stability of pressure maintenance, no more than 0.0007MPa
- built-in self-diagnosis system
- productivity from 3 l / min

The air compressors pure air generators is designed to supply clean air to flame detectors of gas chromatographs.



PURE AIR GENERATOR

The pure air generator is used to power analytical equipment with ultra clean air. Such air can be used, for example, as a carrier gas for a chromatograph.

FEATURES OF PURE AIR GENERATOR:

- Low noise level
- Built-in catalytic air purification system significantly increases the sensitivity and accuracy of chromatographic analysis.
- The moisture filter is equipped with a built-in self-regeneration system, so that the user can forget about routine maintenance.
- Built-in protection against depressurization
- Built-in self-diagnosis system
- Concentration of hydrocarbons after purification less than 0.1 ppm
- Concentration of water vapor after purification less than 10 ppm
- Stability of maintaining the outlet pressure no more than 0.05 atm
- High performance one generator is enough to run up to 8 chromatographs

The equipment produced by the Meta-chrome company is distinguished by its high productivity. The system of catalytic purification from carbon built into the compressors makes it possible to significantly improve the sensitivity of the instruments and, as a result, to increase the accuracy of the chromatographic analyzes. Among other consumer qualities of the equipment, there is a low noise level during compressor operation, stable operating pressure and low power consumption.



The photographs and characteristics of the products presented in the catalog are for informational purposes only and may differ from the real ones.

For more information contact the manufacturer.