RESEARCH AND PRODUCTION ENTERPRISE

Econika Medical Engineering

Price list for Bozon series devices utilized in medical gas therapy - hydrogen, xenon, and ozone

Current medical ozone generators globally produce solely a gaseous mixture of ozone and oxygen.
BOZON generators are inherently distinct from them.
The BOZON family of devices enables the execution of the following procedures:

Xenon treatment

Ozonation of Liquids:
• Preparation of ozonated water

• Formulation of ozonized vegetable oils with a defined peroxide value.

Ozone insufflation:
• Rectal insufflation
• Vaginal insufflation
• Auricular insufflation

Ozone-infused vacuum massage.

Hydrogen Therapy:
• Inhalation of hydrogen
• Preparation of hydrogen-enriched water

Collaborating with solutions:
Saturation of physiological solution:
ozone-oxygen blend
ozone-hydrogen blend

Hematological protocols:
• Autohemotherapy
• Ten Pass

OUR CERTIFICATIONS

The Bozon family is distinctive globally (certificates were acquired by the European division of Econika Medical Engineering), which manufactures medical ozone generators and possesses a dual

A format for quantifying ozone concentration in ozone-oxygen mixtures and aqueous media (distilled water, saline solution). Bozon family devices are equipped with integrated meters for measuring gas flow rate, gas pressure, and ozone concentration in both gas and water. All generators are fully automated.

Technical specifications of the Bozon ozone therapy device

Виды поддерживаемых процедур	Аутогемотерапия общая, аутогемотерапия незначительная, внутривенная инфузия озонированного физиологического раствора, приготовление озонированной воды и озонированного масла, ректальная и вагинальная инсуффляция, нанесение озона на кожу рук и ног, подкожные инъекции озона.
Способ установки начальных параметров (концентрация озона в газе или физиологическом растворе, скорость потока газа, объем и время процедуры)	цифровой ввод с клавиатуры или пульта дистанционного управления.
Способ измерения концентрации озона в газе и воде	УФ-фотометрическая
Способ измерения расхода и давления газа	полупроводниковый дифференциальный манометр
Стабилизация параметров процесса	программа
Диапазон концентрации озона в озоно-кислородной смеси	0,5–120 мг/л
Относительная погрешность измерения концентрации озона в озоно-кислородной смеси	<10%
Диапазон концентрации озона в воде	0,5–30 мг/л
Относительная погрешность измерения концентрации озона в озоно-кислородной смеси	<10%
Диапазон скорости потока озоно-кислородной смеси на выходе устройства	0,1–2 л/мин
Относительная погрешность измерения скорости потока озоно-кислородной смеси	< 10%
Производительность устройства, г/ч	>6 г/ч
Давление кислорода на входе в устройство	0,15–0,2 мПа
Срок службы реактора генератора озона	> 10 000 часов
Потребляемая мощность	<150 Вт
Габаритные размеры устройства	350*110*450
Вес устройства	8 кг

Функциональность и метрология, преимущества озонотерапевтического аппарата Bozon					
Type of ozone therapy procedure	Characteristics of the premier ozone therapy devices globally				Особенности аппарата «Бозон-Н»
	Метрология		автоматическая	метрология	автоматическая
Fundamental course of autohemotherapy	конц.O3 в газовой	полный	полный	полный	полный
	доза O3	полный	полный	ручной расчет	нет
	blood	выход крови			
		возврат крови			
Ozonated saline solution	конц. O3 в газе	полный	полный	полный	полный
	conc.O3 in	На этапе подготовки	Точное требуемое значение	The sole manufacturer globally is Medozon, located in Russia.	нет
		Во время	обслуживании точного		
	физиологического раствора	внутривенного	значения в течение всего времени	нет	нет
		процедуры	процедуры		
Preparation of ozonated oil	конц. O3 в газе	полный	полный	полный	полный
	O3 concentration in oil	вычисление по эмпирической формуле	full	No	No
Preparation of ozonated water.	конц. O3в газе	полный	полный	полный	полный
	конц.O3 в	полный	полный	полный Единственный производитель в мире	нет
	вода			(Медозон, Россия)	
	conc.O3	полный	полный	полный	полный
Rectal and vaginal insufflation	в газовой				
	потоке	полный	полный	полный	нет
	громкость	полный	полный	Ручной расчет	нет
Ozone therapy for the skin surface in plastic. containers	конц.O3 в газе	полный	полный	полный	полный
	поток	полный	полный	полный	нет
	громкость	полный	полный	Ручной расчет	нет

The Bozon family of hydrogen and ozone therapy devices is unparalleled globally and operates entirely autonomously. This line within the Bozon series utilizes an electrolytic source of gaseous oxygen and hydrogen, thereby obviating the necessity for compressed gases or oxygen concentrators. The Bozon-N-Noble xenon therapy device features a sensor for the concentration of xenon, krypton, argon, and helium. It functions within a closed-loop system and is fully automated.

Ozone therapy device "Bozon-M UNIC"

This device distinguishes itself from other models in the Bozon series by eliminating the need for an oxygen cylinder or concentrator. It generates an ozone-oxygen mixture (OOM) and an ozone-hydrogen mixture, facilitating a diverse array of therapeutic applications.

Technical specifications of the device.
Hydrogen flow rate: 300 ml/min
Ozone-oxygen mixture flow rate: 120-150 ml/min
Hydrogen concentration in the air-hydrogen mixture: 1.4-1.6
Ozone concentration range: 5-60 mg/l
Electrical conductivity of distilled water utilized in the device: 0-2 μS/cm
Maximum consumable supply of distilled water: 600 ml
Maximum power consumption of the device via the power adapter ASUS ADP-230GB B: 19.5 V
Operating voltage of the device: 19.5 V
Continuous operation time: 16 hours
Device dimensions (L×W×H): 500
*300*300 mm
Device weight: 14,4kg

Ozone Therapy Device "Bozon-N"

The ozone therapy unit "Bozon-N" is a streamlined version of the automated ozone therapy unit "Bozon-N colop," retaining the primary technical specifications of the fundamental generator while differing in dimensions, the level of automation in the procedure delivery process, and the design of the casing.

It is noteworthy that this compact version of the Bozon N device surpasses all ozone therapy devices currently available in the Ukrainian market. Specifically, the device includes:

· Integrated ozone concentration meter in ozone-oxygen mixture;

· Integrated ozone concentration meter for water and saline solutions;

· Ensures seamless automatic regulation and maintenance of flow rate within the range of 200.0 ml/min to 1 liter/min;

· Ensures seamless regulation and maintenance of ozone concentration in gas within the range of 0.5-100.0 mg/l;

· Delivers ozone concentration in gas within the range of 0.5-100.0 mg/l at a gas flow rate of 200.0-500.0 ml/min and 0.5-60.0 mg/l at a flow rate of 1.0 l/min, achieving performance levels that are 4-5 times superior to those of devices from competing manufacturers.

Ozone therapy system "Bozon-N Color"

A notable characteristic of the unit is its touchscreen interface. Control is facilitated by tapping a button on the screen, followed by the selection of procedure parameters from a pop-up submenu. Actions are supplemented by audio prompts.

The device includes:

· Integrated ozone concentration meter in ozone-oxygen mixture;

· Integrated ozone concentration meter for water and saline solutions;

· Ensures seamless automatic regulation and maintenance of flow rate within the range of 200.0 ml/min to 1 liter/min;

· facilitates seamless regulation and maintenance of ozone concentration in gas within the range of 0.5-100.0 mg/l;

· Delivers ozone concentration in gas within the range of 0.5-100.0 mg/l at a gas flow rate of 200.0-500.0 ml/min and 0.5-60.0 mg/l at a flow rate of 1.0 l/min, achieving performance levels that are 4-5 times superior to those of devices from competing manufacturers.

Ozone Therapy Device "Bozon N-Navigator"

It encompasses all the benefits of the "Bozon-N color" model. The device is operated through a touch screen.
Additionally, the device features an integrated vacuum pump equipped with an ozone destructor.
The device includes:

· Integrated ozone concentration meter in ozone-oxygen mixture;
· Integrated ozone concentration meter for water and saline solutions;
· Ensures seamless automatic regulation and maintenance of flow rate within the range of 200.0 ml/min to 1 liter/min;
· Ensures seamless regulation and maintenance of ozone concentration in gas within the range of 0.5-100.0 mg/l;
· Delivers ozone concentration in gas within the range of 0.5-100.0 mg/l at a gas flow rate of 200.0-500.0 ml/min and 0.5-60.0 mg/l at a flow rate of 1.0 l/min, achieving performance levels that are 4-5 times superior to those of devices from competing manufacturers.

Automatic ozone generator "Bozon-N-EBOO"

Generation of OKS for a designated duration with a gas concentration ranging from 0.1 to 100 mg/l, accompanied by a specified flow rate between 0.2 and 1 l/min;

Executing the procedure for extracorporeal blood treatment with ozone in large volumes using a specialized rotary film contactor. The rotation speed of the contactor varies between 35 and 45 rpm.

Plasmapheresis is conducted with oxygenation in a standard hemofilter, followed by ozonation utilizing an open plasma fractionator (OPF). The necessary parameters for ozone gas concentration, gas flow rate, blood collection and return, processed blood volume, and the quantity of heparin administered are input via a touchscreen interface. Blood collection and return rates range from 5 to 100 ml/min, with the procedure lasting between 100 and 150 minutes. Throughout the process, 3 to 6 liters of blood are processed.

During the process of extracorporeal blood treatment utilizing substantial volumes of ozone, the following actions are undertaken:

· Regulation of the volume of processed blood;

· Observing the presence of blood in the collection and return lines;

Clinical experience to date affirms the significant therapeutic potential of extracorporeal blood treatment utilizing large volumes of ozone in patients suffering from severe peripheral arterial disease, coronary heart disease, cholesterol embolism, severe dyslipidemia, Madelung's disease, sensorineural hearing loss, necrotizing fasciitis, antibiotic-resistant infections, Lyme disease, and viral hepatitis.

Bozon-N-Noble Inhalation Apparatus

Modern medicine is progressing swiftly, with innovative technologies gaining popularity. Currently, advanced clinics and medical centers are employing xenon inhalation therapy.

Xenon possesses analgesic, antispasmodic, cardiotonic, neuroprotective, anti-stress, antihypoxic, immunostimulating, anti-inflammatory, anabolic, neurohumoral, and vasoplegic properties. It acts as an antagonist of NMDA (N-methyl-D-aspartate) receptors and reversibly enhances the activity of gamma-aminobutyric acid (GABA) receptor channels, thereby facilitating its therapeutic application.

Clinical studies on xenon's antidepressant, anxiolytic, adaptogenic, and nootropic properties indicate its potential as a completely safe and effective treatment for drug and alcohol addiction, as well as for the care and rehabilitation of individuals with mental disorders affecting the nervous system. Additionally, it is beneficial for athletes and patients engaged in activities that demand high levels of endurance, concentration, and focus. Xenon has demonstrated efficacy in alleviating panic attacks, with symptoms subsiding within two minutes of inhalation. Furthermore, medical xenon is effective in managing pain syndromes of various origins, including migraines, osteochondrosis, and neuralgia, typically requiring 5-10 inhalations for relief. Its applications have also extended significantly into the field of dentistry.

The device is engineered for therapeutic applications utilizing xenon-oxygen, krypton-oxygen, or helium-oxygen mixtures. Each of these combinations possesses distinct therapeutic properties and can be employed independently.

A device designed for the inhalation of one of four gas mixtures:
He-N-O2 mixture - oxygen >25%, helium 20-60%, with the remainder being nitrogen;
- Ar - N - O2 mixture - oxygen >25%, argon 10-60%, with the remainder being nitrogen;
- Cr-N-O2 mixture - oxygen >25%, krypton 5-60%, with the remainder being nitrogen;
- Xe - N - O2 mixture - oxygen >25%, xenon 5-30%, with the remainder being nitrogen.

Transitioning from one type of breathing mixture to another is achieved by replacing the gas cylinder. The type and composition of the gas mixture are defined in the initial dialogue and are upheld throughout the procedure.
Inhalations are delivered through a closed breathing circuit. Oxygen concentrations are sustained at a minimum of 25%, while inert gases are regulated to a specified level. The helium-oxygen mixture may be heated to temperatures ranging from 40 to 90°C.
The unit is equipped with an integrated mechanism for the sorption of carbon dioxide from the breathing circuit.
Automatically registered:
- utilization of noble gases,
the residual gases in the cylinder,
the residual sorbent in the carbon dioxide sorption unit.

The device comprises a control unit and a breathing circuit control system featuring a touch screen 1, a breathing bag 2, a transparent protective enclosure 3, a compartment for a buffer oxygen control tank 4, and a compartment for the storage of a cylinder containing an inert gas.
At the customer's request, the device may be outfitted with a single-channel cardiac monitor and a denitrogenation unit utilizing a specialized oxygen concentrator derived from the air.
Overall dimensions: 1300 x 850 x 490 mm; Weight of complete set: no more than 22.5 kg.

Ozone-hydrogen generator "Bozon Home H2O3"

The generator comprises the ozone-hydrogen source and a heated hydrogen platform (hereinafter referred to as the "Platform") designed for beverage containers. The center of the "Platform" features a hydrogen outlet. The unit is operated via buttons, and a color screen presents the current status of the device.

The device serves as a source of an ozone-oxygen mixture (OOM) for rectal, vaginal, and auricular ozone insufflation therapy, for saturating saline with ozone and ozone-hydrogen mixtures, for producing ozonized water, and for creating ozonized oils. Additionally, the device facilitates hydrogen inhalation and the preparation of hydrogen-saturated drinking water and hydrogen-infused beverages, including hot drinks and alcoholic options.

AUXILIARY DEVICES

Bozon-BAGTO Laser Module

The "Bozon-BAGTO" module is engineered to expedite and streamline the process of large-scale autohemozone therapy, reducing the duration of the procedure by two to four times. Reversible peristaltic pump featuring a cam-type actuator and a microprocessor control system.

The Bozon-BAGTO module markedly decreases procedure time by as much as fourfold. Employing a 0.7 mm needle for blood collection substantially minimizes procedural trauma. The device is equipped with an integrated blood flow regulator, a timer, and a safety mechanism that prevents air from entering the vein during the reinfusion of ozonated blood.

Bozon-BAGTO Laser New Module

It distinguishes itself from the previous model by its capability to execute a comprehensive MultiPass (Ten-Pass) procedure, accompanied by a specialized package featuring a blood filter.

Ozone-vacuum module - Ozone-vacuum massager

Vacuum massage combined with ozone represents a groundbreaking approach to health restoration, body rejuvenation, and the attainment of beauty, slenderness, and youthfulness. The "Bozon-vacuum" module harnesses the distinctive properties of ozone and vacuum...

Utilizing the "Bozon-vacuum" module, a vacuum is generated within a specialized attachment (the kit comprises four attachments of different sizes), and an ozone-oxygen mixture is administered. Throughout the procedure, the areas of the body being massaged are treated with the ozone-oxygen mixture.

With this local influence, outstanding results are attained:

Skin: When drawn into the nozzle, the skin undergoes volumetric mechanical action (massage), enhanced circulation (nutrition), and stimulation of collagen synthesis and regeneration. In instances of rapid weight loss, it aids in diminishing the appearance of sagging, excess skin.

Subcutaneous fat: The volumetric mechanical action (massage) occurs in the subcutaneous tissue as it is drawn into the nozzle along with the skin. This process facilitates the breakdown of subcutaneous fat.

The visibility of cellulite is diminished, lymphatic circulation is enhanced (resulting in reduced swelling and congestion), and waste products and toxins are eliminated.
Muscles: Massage enhances circulation, eliminates lactic acid, and alleviates fatigue and discomfort. It expedites recovery from injuries and strains, physical exertion, and athletic training. Muscle spasms are mitigated.
Joints: Enhanced nutrition, restored mobility, and the elimination of salt deposits; General strengthening effect: alleviates stress, fatigue, and anxiety. Following the procedure, the patient experiences a surge of energy and vitality. Sleep patterns are normalized. The activation of biologically active points and metabolic processes bolsters immunity and the body's overall resilience to infections and adverse environmental conditions. All these factors contribute to overall health and well-being.

The "Bozon-vacuum+" module functions as an ozone-vacuum massager.

It distinguishes itself from the “Bozon-vacuum” module by incorporating an additional function: it evacuates gas from the bag during application to the skin.

Module "Bozon Inga"

Engineered for the inhalation of ultrasonic hydrosol of ozonides.

Measuring device "Bozon DFG"

The Bozon DFG measuring instrument is engineered to assess ozone concentration in gas, saline solution, and distillate.

Bozon G Gas Ozone Measurement Device

The measuring instrument "Bozon-G" is intended for assessing the concentration of ozone in gas.

Bozon LOR module

A device designed for the administration of an ozone-oxygen mixture into the ear canal, featuring a catalytic deozonator.