

CRYOGENIC PHYSIOTHERAPY

Cryogenic physiotherapy is the combination of recent achievements in physics and refers to the technologies of XXI century. Scientific achievements analysis allowed defining the mechanism of stimulating effect on human body. Cryogenic equipment produced according to the modern idea of medical effect of lower temperatures, provides high positive results of low temperatures, minimum discomfort for the patient.

Cryogenic physiotherapy is the fastest and the most comfortable cosmetic procedure. A man up to the neck is immersed in the cooled gas with temperature up to -150°C for 2 – 3 minutes. The temperature and the time of the procedure is defined according to the peculiarities of human skin therefore during the course of treatment only thin surface skin layer is cooled where heat receptors are located. In general the body doesn't have sensitive overcooling. Because the cooling gas specific conditions of the procedure is enough comfortable, it is really nice to feel cold especially in summer time.

People, who once tried cryotherapeutical treatment, repeat it with pleasure, in spite of rather high cost (10 to 20 euro per one procedure). The reason for its popularity is that the procedure causes emissions of endorphins. In order to get the same effect it's necessary to have intensive physical exercises during 1,5 – 2 hours. Safe and short effect is so great, that endorphins are produced in bodies at hang-over, 2 – 3 minutes in cryosauna and hard "morning" disease goes away. The main therapeutic effect is that the body mobilizes under cooling. The immunity increases, the aches go away, the skin metabolism activates. The treatment gives great cosmetic effect, particularly in cellulites and overweight treatment. The list of positive cryotherapeutical usage results can be enormous, because the procedure balances the immunity and the metabolism, i.e. removes original reasons of all diseases. But for the success it is necessary to use cryosaunas, which are able to provide maintaining of cryotherapeutical method.

Cryotherapeutical method

The main problem of practical cryotherapy is the wrong understanding of the reasons of positive results. Many specialists believe that for the recovery it is necessary to enter the cold room. In fact the procedures in cryosauna are effective only in the case if temperature on skin surface lowers below 0°C. For the skin such short overcooling is safe, but cold skin receptors send alarm signal of great power, that under its influence the most difficult diseases. In order to cool the skin properly the gas temperature should not be more than -130°C, and the time of treatment no less than 2 min. The contact area between skin and gas plays one of the main roles. You should immerse the most part of the body in cold and wear minimum of clothes. The more receptors are in overcooling zone, the better result will be. Cryotherapy is used for the treatment of bronchial asthma, rheumatoid polyarthritis, psoriasis, eczema, allergy, burns, injuries etc.

Cryosauna with using of nitrogen cooling

The proper choice of the equipment for cryotherapeutical treatment is the main reason for providing of good medical and commercial success. The temperature in cryosauna should be more than -130°C. Utilization experience shows, that this requirement is met only in cryosaunas using liquid nitrogen as a cooling source. The gas cooling before it's supplying into the procedure cabin causes its saturation (enrichment) of nitrogen vapors, therefore the patient should be protected with different means against breathing such air. The most reliable

and safe equipment for cryogenic treatment is cryo-sauna “KAEKT-01 KRYON”, where patient is immersed in cryogenic gas up to the shoulders. The area above the cabin is ventilated, so the patient breathes pure atmospheric air. The cabin has movable floor for the patients of low height.

In spite of small size and simple look, nitrogen cooling cryosaunas superb so-called autonomic cryosaunas by their treatment results. Using of liquid nitrogen allows to cooled body surface with necessary velocity. Nitrogen cryosauna cooling power is 10 times more effective than compressive system. This great difference in power explains the quality consequence between nitrogen and compressive cryosaunas.

Cryo-sauna “KAEKT-01 KRYON” is 10 times cheaper; can be received within 40 working days after payment of the purchase price; can be installed within 1 day and occupies approximately 4 m². Thanks to these advantages the cryo-sauna KAEKT-01 “Kryon” has been successfully exported in Finland, Germany, USA, Turkey, Slovakia, Korea, Israel, Poland, Latvia, Estonia, Ukraine, Italy etc.

The main advantages

- Complex “KAEKT-01 KRYON” is 10 times cheaper as its foreign analogues.
- Simplicity and safety of using.
- Low power consumption, the system is plugged to public network.
- Minimum preparation time for working option, preparation time takes 5 – 10 minutes.
- Minimum area (it occupies 4 m²).
- Minimum requirements for technical qualification of the staff.
- Complex KAEKT-01 “KRYON” is the most often purchased cryosauna in the world, this system has been mostly produced and exported in the last 10 years.
- With minimum size and power the complex KAEKT-01 “KRYON” makes possible 15 procedures per hour, and is 8 times more effective than his analogues.
- The purchase price of the complex “KAEKT-01 KRYON” amounts to 26 000 EURO.

At the present time there are in use more than 200 cryosaunas in the world. According to the experiences, the most successful saunas can serve about 60 patients a day with the procedure cost ten to twenty EURO per patient.

Technical characteristic of cryotherapeutical complex KAEKT-01 “Kryon”.

The temperature in patient cabin during the procedure	from -130°C to -150°C
The time for starting mode	30sec
Procedure time	from 30 up to 180 sec
Cooling agent consumption	1,2 kg/min
Starting cooling agent consumption	3,0 kg
Weight of system	500 kg
System power consumption	1,0 kW
Nominal voltage	230±23 V, 50 Hz
Dimensions [mm]	1600 x 2450 x 2200