

THE REDESIGN OF **Operator's Manual and Training Materials**

THE GOAL

To **standardize** and **improve** the overall **quality** of the cryotherapy treatment and service given by **CryoSpace** Operator's **worldwide**.

METHOD

By understanding the physiological **effects of cryotherapy**

By understanding the **unique aspects of** Cryotherapy by **CryoSpace**

By understanding all **safety measures** and risks of Cryotherapy

By standardizing the **service procedures** accordingly

CRYOTHERAPY BY CRYOSPACE
General Information



CRYOTHERAPY

Whole Body Cryotherapy is "**accelerated cooling**" of the body for **therapeutic purposes**. During the treatment, the cabin will be cooled to a maximum of **-194° Celsius** for a maximum duration of **3 minutes**.

THERAPEUTIC PURPOSES

To **improve the blood circulation with enriched and healthy blood** and to stimulate the **hormonal production**. As a result you can experience accelerated recovery, pain and stress relief, weight loss, and an **improved overall well-being**.

HOW DOES CRYOTHERAPY WORK?

During the treatment the brain registers the increasing cold on its skin. As a result, the body will **draw all the warm blood out of its limbs to the upper body** in order **to protect the vital organs** from “freezing”. **The veins** to-and-from the limbs **will contract (vasoconstriction)** to ensure that the warm blood stays in the upper body.

The accelerated blood circulation in the upper body creates **enriched blood** (red and white blood cells, antioxidants, oxygen etc.). During this process your brains come to action, they produce **endorphins and noradrenaline** to increase your pain threshold and your concentration respectively.

After 3 minutes you step out of the cabin back into the warmth. The brain registers the warmth and lets the **blood rush back into your limbs (vasodilation)**. The accelerated blood flow reaches tendons and bones that would otherwise not be reached. The enriched blood stimulates **faster recovery, anti-swelling** and **anti-inflammatory** effect. **Pain is relieved due to the endorphins boost.**

Keeping your body warm during the treatment costs energy and in addition can **speed up your metabolism for up to 8 hours post treatment**. The **additional energy consumption** corresponds to approximately **30-45 minutes of exercise**. The cold on your stomach also affects your fat layer; slowly **turning white fat into brown fat**. Unlike the white fat, brown fat can be utilized by the body as an energy source during exercise.

Endorphin is the fastest working anti-stress hormone and provides release of several (happy) hormones that, among other things, improve your happiness, energy and insulin. The result also includes reduced allergic reactions and food hypersensitivity.

WHY CRYOTHERAPY?

The introduction of cryotherapy has not only paid off in the sports world but has also contributed to successful results in the treatment of a number of lifestyle diseases in the field of biomedical applications. Examples are **stress, rheumatic diseases, (over) fatigue, depression, inflammation, diabetes, and obesity**. Let us specify further below.

Mood enhancement, deep relaxation, peaceful feeling

An important, and often underestimated, phenomenon is that the hormonal effects of cryotherapy cause significant sleep improvements. Because the hormone management system responds to cryogenic temperatures, the release of especially endorphin has a positive influence on perception and state of mind.

Analgesic and swelling reducing

It is, for example known that cryotherapy has a pain-killing effect. Cryotherapy is also known to reduce swelling. A consequence of these effects is that it improves the mobility of people who suffer from pain and swelling. Cryotherapy is therefore often used for people with rheumatic diseases.

Preparation to withstand higher loads during exercise

Immediately after exposure to low temperatures, blood vessel / capillary dilatation takes place, which increases blood flow together with oxygen and nutrients in the body. Consequently, the elimination of metabolic waste is accelerated. The anti-inflammatory, anti-swelling and analgesic effects help to eliminate the results of the overload of the workout.

Decrease in heart rate

It has also been shown that regular cryotherapy, as well as prolonged exercise, lowered the heart rate controlled by the sympathetic nervous system.

WHY CRYOTHERAPY?

Anti-inflammatory

Cryotherapy has a strong antioxidant and anti-inflammatory effect. For that reason, there are also indications that Cryo can be useful in fibromyalgia.

Improvement of skin quality, contribution to cell repair, lasting effect

Dermatologically, the low temperatures have an improvement on skin quality. The numerous skin benefits are, for example, skin softness, acne prevention, and increased collagen production. Cryo temperatures also induce increased blood circulation and an increase in the number of white blood cells, which leads to an improved immune system. The increased blood circulation ensures that the skin is supplied with sufficient oxygen and nutrients, and also to adequately remove toxic substances.

Faster recovery

Regarding recovery, Cryotherapy is an essential component but also in the clearance of damaged muscle fibers, which are caused after intensive exercise.

Decrease in muscle tension

The application of cryogenic temperatures to the muscular system causes a gradual decrease in the temperature of the skeletal muscles and at the same time reduces blood flow through the capillaries. This creates a calming effect at the same time.

Weight reduction

Another important factor where Cryo stimulation can play an additional role is the boost of metabolism. Short exposure to extremely cold temperatures on a regular basis can stimulate heat production, that is, create an increased metabolism, which has a beneficial effect on weight loss.

CRYOTHERAPY CLASSIFICATIONS



Cryotherapy Cabine/Chamber

Use of Liquid Nitrogen for treatment

Head and neck free from cold

Temperatures up to -194°C

Private treatment



Cryotherapy Sauna

Use of electricity for treatment

Entire body and head exposed to cold

Temperatures up to -110°C (-80°C)

Group treatment



CRYOTHERAPY BY CRYOSPACE

Personal treatment for optimal results

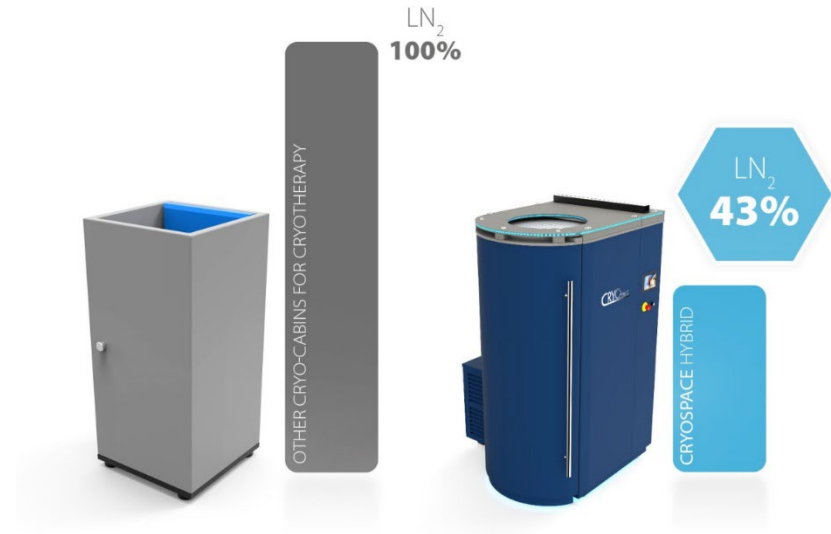
With CryoSpace you want to help your customers in the best way possible. You are curious about their problems and their goals and you understand how cryotherapy works. In return, you can provide them with a tailored treatment plan for their needs to get the best results.

CRYOTHERAPY BY CRYOSPACE
Features and Benefits

CRYOSPACE FEATURES AND BENEFITS

Most Economical Cryotherapy Chamber

Due to Its unique hybrid system, combining liquid nitrogen (for optimal treatment temperatures) and an electric motor (for pre-cooling and standby-mode), CryoSpace can consume **up to 55% liquid nitrogen less** compared to other cryotherapy chambers.



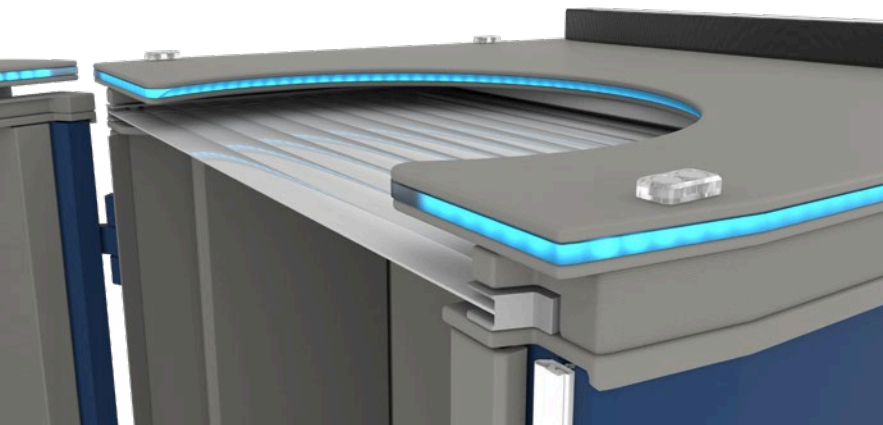
CRYOSPACE FEATURES AND BENEFITS

Safety First

CryoSpace offers several standard features to ensure the safety of the user at all times. Such features include:

- **Flange** allowing to for the liquid nitrogen vapor to be directed away from the user inside the chamber during treatment
- **Automatic ventilation / quick exhaust** of the liquid nitrogen vapor from the chamber when treatment finishes to ensure safe breathing for user when lift lowers down
- **Door sensor** which monitors if the door is properly closed
- **Emergency stop** which initiates the emergency shutdown procedure
- **Independent oxygen sensor** to accurately measure the oxygen level in the room





CRYOSPACE FEATURES AND BENEFITS

Designed to keep it Cool

Your CryoSpace is designed with the main purpose to keep the maximum amount of cold inside the chamber and minimizing any unnecessary wastage.

- **Certified Cryogenic Materials** for minimum wastage while providing durability for long-term use.
- **Automatic Electric Blind** that ensures that the cold stays inside when the chamber is not being used for a treatment. Additionally, it makes pre-cooling and standby-mode run more efficient.

CRYOSPACE FEATURES AND BENEFITS

Branding

Your CryoSpace should be an **extension of your brand**. Therefore we offer a **wide range of standard color** options for both the exterior as interior. Additional option include custom colors and logo placement.

Scheduler Automation

Your CryoSpace will cool (and defrost) itself according to an **automated schedule** making it **ready to use when you open** your salon.

Additional Options

- Built-in Soundbar
- LED-lighting / colorthrapy (in correspondence with treatments)
- Custom color and logo





CRYOSPACE PRO – ADDITIONAL BENEFITS

Treatments Based on Medical Research

Cryotherapy by CryoSpace gives customers optimal results with a unique system of preprogrammed treatments. Each treatment is based on years of know-how and medical research which determines the intensity, duration and frequency of the treatments based on the desired goal. The three main categories of treatments are (Bio)**Medicine**, **Performance** and **Wellness**.

	1	2	3	4	INFORMATION				
	AIM ▼	TREATMENT ▼	TIME ▼	INTENSITY ▼	When?	How many?	How often?	Perceptible results	Learn more
MEDICINE	Quicker recovery after injury, surgery or fracture.	After Injury	3:30 min	MEDIUM	whenever possible	10-20 per month	1 per day in case of severe pains; up to 3 per day with less pain	strong analgesic effect after 1 treatment	suggested in chronic pain conditions
	Elimination of weakness and immunity problems.	Immune Stimulation	2:00 min	MEDIUM	whenever possible	10-20 per month	1 or 2 per day	stimulation of immune system after 1 treatment	in case of sore throat a mask is recommended
	Depletion of inflammation and pain.	Pain Relief	2:30 min	MEDIUM	whenever possible	no recommendation	1 per day in case of severe pains; up to 3 per day with less pain	strong analgesic effect after 1 treatment	as soon as pain occurs
PERFORMANCE	Increase of energy and motivation to action.	Energizer	1:30 min	HIGH	before physical activity	daily if needed	depending on type of physical activity (up to 3 per day)	after 1 treatment	up to one hour before physical activity (optimally the shortest possible time between treatment and physical activity)
	Reduction of fatigue exercise-induced. Mitigation of muscle pain.	Extreme Recovery	3:00 min	HIGH	after physical activity / exercise	20 per month to maintain optimal post-workout regeneration	depending on type of physical activity (up to 3 per day) to maintain optimal post-workout regeneration	after 1 treatment	directly after physical activity
	Stimulation of hormonal management.	Hormone Booster	2:30 min	HIGH	whenever possible	10-20 per month	2 per day	after 2 treatments	physical activity after treatment is recommended
WELLNESS	Reduction of fatigue, lethargy and lack of concentration.	Refresher	2:00 min	LOW	whenever possible	as many as required	1 per day or more if needed	after 1 treatment	can be done with clothes on and without gloves
	Elimination of headache, hangover, pain in muscles and joints.	Hangover Cure	2:30 min	MEDIUM	whenever possible	no recommendation	1 per day or more if needed	after 1 treatment	drinking at least one glass of water before and after treatment is recommended
	Contribution to weight loss.	Fat Loss	4:00 min	LOW	whenever possible	at least 10 everyday or every other day	1 or 2 per day; daily or every other day	after 5 treatments	physical activity before and after treatment is recommended

CRYOSPACE PRO – ADDITIONAL BENEFITS

Improved Customer Experience

The CryoSpace Hybrid Pro focusses on the experience of your customers:

- **Digital intake** via tablet
- **Heads up display** (27" LCD curved screen) with **live session information** for customer e.g. live temperature, treatment program, treatment benefits and camera view.
- A **23.8" touch panel** for operator.
- **Digital photo** of session, automated (also print possibility)
- **Sessions reports**, automated





CRYOSPACE PRO – ADDITIONAL BENEFITS

Safety

CryoSpace Pro offers an additional **presence sensor** which monitors the user's proper positioning during treatment. If a user does not follow the prescribed safety position, then your CryoSpace will activate an alarm followed by **emergency shutdown**.

Customer Management System

Post-treatment report will automatically be sent to your customer via email including the photo made during treatment. System allows for online customer statistics and treatment history, QR code login, printer integration and digital intakes through tablet. Additional integration possibilities with CRM-systems.

CRYOTHERAPY BY CRYOSPACE
Technical Requirements

ROOM INSTALLATION REQUIREMENTS

Minimum height requirement	2,5 m. (2,8 m for Pro)
Minimum dimension door width	80 cm. (This includes all doors that the CryoSpace needs to transport through)
Minimum room temperature	5°C
Maximum room temperature	25°C
Minimum room humidity	15%
Maximum room humidity	60% (non-condensing)
Independent ventilation advised	Yes
Ventilation transfer location	Directly outside to designated area
Independent ventilation dimensions	Minimum channel diameter Ø 100 mm
Power supply	230 VAC/13 A
Number of required sockets	2 (for CryoSpace unit and for Wifi router)

IMPORTANT NOTES

Storage and transportation of liquid nitrogen must be according to the local regulations.

If there is no possibility to connect the chamber directly to the independent ventilation channel:

- Keep door to the room or window (slightly) open during treatment.
- Independent oxygen sensors are mandatory to ensure the necessary safety.
- Keep in mind that CryoSpace emits max. 75 m3/h nitrogen vapour into the installation room.

LIQUID NITROGEN CYLINDERS FOR CRYOSPACE PRODUCTS

- A Liquid nitrogen cylinder must have **pressure builder**.
- Liquid nitrogen cylinder must have **safety valves** and **manual valve** for each device.
- Liquid nitrogen cylinder should have **pressure valve of around 1,5bar (22PSI)** for **optimal nitrogen consumption**, but not more than 3,5bar (50PSI).
- Cylinders must only be destined for the handling of **liquid nitrogen**.

ADDITIONAL REQUIRED EQUIPMENT

- **Wheel set** for easy transportation of cylinders
- **Cryogenic gloves**
- Independent **oxygen measuring system**
- (Isolated) nitrogen hose ending with **male thread 3/8"npt**



CRYOTHERAPY BY CRYOSPACE
Procedures and Safety



THE ROLE OF AN OPERATOR

1. **Informing** users about cryotherapy the possible risks (contra-indications)
2. **Asking** users about their goals
3. **Advising and selling** treatments and treatment plans based on their needs
4. **Explaining** the treatment procedure
5. **Guiding** the user through the treatment (incl. post-treatment)
6. **Safe keeper** of the user at all times

POSSIBLE RISKS OF CRYOTHERAPY

As a CryoSpace operator you have to **ensure that at all times, the user** inside the chamber is **safe and feeling well**. Below you can find the possible **risks** you need to take into account when operating CryoSpace.

Not adhering to protocol can result in serious injury

Whether you are helping a customer, colleague or family member, protocol must be followed at all times regarding intake, treatment procedures and post-treatment procedures.

Contra-indication protocol

User must always begin with an intake where they will have to sign an document stating they do not have any of the contra-indications of cryotherapy. Users with the mentioned diseases / conditions cannot participate in a session until they receive the consent from a medical specialist. Knowingly false statements by users cannot be accepted.

Insufficient Oxygen

Release of nitrogen into the atmosphere of a closed room or incorrect user position inside the chamber may result in the insufficient breathing of oxygen by the user (and operator). This may cause dizziness and can even cause the user to faint with all its consequences.

Cryogenic burns

Excessive exposure to extreme temperatures can cause the skin to freeze resulting in (serious) **burn marks**. This process can be accelerated by damp/wetness on the skin (i.e. sweat and creams), metal that is in contact with the skin and by open wounds.

ENSURING USER SAFETY AT ALL TIMES

On the following pages you can find the various aspects you need to take into account when operating CryoSpace. **All aspects must be communicated to the user and verbally and visually verified before starting a treatment.**

Skin Conditions

In order for a user to enter a CryoSpace you must check if their skin:

1. **Is dry** (no cream, no sweat etc.)
2. **Is not sticking to metal** (e.g. jewelry, piercings, metal clip in bra etc.) Earrings are not a problem.
3. **Has no open wounds**, where the blood is visible

Protective clothing

In order for a user to enter a CryoSpace, users are required to wear:

1. **Socks**
2. **Thick-sole footwear**
3. **Underwear**
4. **Gloves**



ENSURING USER SAFETY AT ALL TIMES


Proper user position inside chamber

It must be strictly observed that the mouth of the user inside the chamber is at least 10 cm above the flange in the safe breathing zone to ensure proper breathing of the ambient air. **Do not start a treatment until the user is in proper position.** Furthermore, be aware that when user is talking during the treatment, it can lead to extra risk of breathing excessive liquid nitrogen vapour. Improper user position can lead to a loss of the user's consciousness in mere seconds. **In case of doubt, always raise the lift.**

GUIDING THE USER

First time Users

First time user require more time, patience and guidance. Cryotherapy is new for them, it is scary and they are insecure if they can withstand the extreme temperatures. To **ensure a positive first experience and a secure a second visit**, is is therefore important to:



Give Intake	Explain and verify protective clothing and skin conditions	Explain the treatment and how the machine works	Guide them through the treatment	Post-treatment care
Explain all risks involved with the use of cryotherapy and have customers fill out the digital intake form with contra-indications.	Whether you are helping a customer, colleague or family member, protocol must be followed at all times regarding intake, treatment procedures and post-treatment procedures.	Whether you are helping a customer, colleague or family member, protocol must be followed at all times regarding intake, treatment procedures and post-treatment procedures.	Whether you are helping a customer, colleague or family member, protocol must be followed at all times regarding intake, treatment procedures and post-treatment procedures.	Whether you are helping a customer, colleague or family member, protocol must be followed at all times regarding intake, treatment procedures and post-treatment procedures.

POST-TREATMENT

Below you can find the various aspects you need to take into account when operating CryoSpace. **All aspects must be communicated to the user and verbally and visually verified before starting a treatment.**

Drink water

With CryoSpace you want to help your customers in the best way possible. You are curious about their problems and their goals and you understand how cryotherapy works. In return, you can provide them with a tailored treatment plan for their needs to get the best results.

In case they have difficulty warming up

With CryoSpace you want to help your customers in the best way possible. You are curious about their problems and their goals and you understand how cryotherapy works. In return, you can provide them with a tailored treatment plan for their needs to get the best results.

Explain the possible effects they can experience that day

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Sell treatment plan

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EXAMINATION OF CRYOSPACE OPERATORS

ADDITIONAL FOCUS TOWARDS

Cryotherapy classifications

How cryotherapy works

The benefits of cryotherapy

The benefits and features of CryoSpace

Technical room requirements

Liquid nitrogen cylinder requirements

The role of CryoSpace operators

Risks of Cryotherapy

Contra-indications

Safety protocols

Treatment protocols

CRYOTHERAPY BY CRYOSPACE
Our Product Presentation



THE COOLEST PLACE ON EARTH



CRYOTHERAPY

Whole Body Cryotherapy is "**accelerated cooling**" of the body for **therapeutic purposes**. During the treatment, the cabin will be cooled to a maximum of **-180° Celsius** for a maximum duration of **3 minutes**.

THERAPEUTIC PURPOSES

To **improve the blood circulation with enriched and healthy blood** and to stimulate the **hormonal production**. As a result you can experience accelerated recovery, pain and stress relief, weight loss, and an **improved overall well-being**.

CRYO FOR PERFORMANCE

To increase physical and intellectual performance.

With whole-body cryotherapy, you increase physical and mental performance and simultaneously reduce the risk of injury. Treatment up to three minutes facilitates the following physiological and psychological processes in the body:

- Improvement of the cognitive and physiological provision of performance
- Accelerates recovery and regeneration processes after overloads and injuries
- Facilitates therapies to reduce hypertension in the muscular system
- Increases the energy level and improves sleep quality
- Pain relief with concomitant anti-inflammatory effect (analgesic effect and anti-swelling effect)
- Increase of serum beta-endorphins, noradrenalin, adrenalin and testosterone
- Improvement of immune system activity
- Can lead to a reduction of performance-related “fear of failure” at the crucial moment
- Positive anti-oxidative effect on the whole body, thus preventing over acidification.



CRYO FOR WELLNESS

For a better quality of life.

Treatment up to three minutes facilitates the following physiological and psychological processes in the body:

- Positive anti-aging effect through rejuvenation processes and tissue recovery
- Increased collagen production for a noticeably smoother and firmer skin
- Positive effect on problematic areas (e.g. with cellulite, acne, etc.)
- Release of endorphins, mood elevation and anti-stress
- Activation of libido
- Boosted metabolism
- Increase of energy level
- Weight reduction through increased caloric requirements
- Increase of testosterone level (in men)
- Positive impact on mental disorders
- Improvement of falling asleep and sleep quality
- Improvement of immune system activity



**STAY COOL
& HEALTHY**

CRYO FOR (BIO)MEDICINE

Accelerates recovery and regeneration process.

Treatment up to three minutes facilitates the following physiological and psychological healing processes in the body:

- Pain relief, anti-inflammatory effect and anti-swelling effect
- Reduction of cholesterol level (significant reduction of LDL/increase of HDL)
- Enhances the effect of many orthopedic therapies (e.g. for rheumatism, back pain, and many more)
- Improvement of the immune system
- Activation of hormone production (mood elevation, enhanced sleeping quality and energy budget, activation of libido, reduction of anxiety disorders and motoric hyperactivity)
- Positive impact on mental disorders (e.g. depression)
- Positive impact on autoimmune disorders
- Accelerates recovery and regeneration processes after overloads and injuries and surgeries
- Facilitates the rejuvenation process and tissue recovery (increased collagen production)





CRYOSPACE MED

- Certified for use in hospitals, clinics, doctor's offices, physiotherapy practices, and more
- CryoSpace® Med is medically certified by TÜV Rheinland



CRYOSPACE ACTIVE

- High-level entry model
- Patented technology and durable materials
- New dynamic liquid nitrogen distribution system for better performance and improved consumption



CRYOSPACE HYBRID

- Most economical cryo cabine in the world
- Unique hybrid system combining liquid nitrogen and electricity for optimal treatment temperatures while keeping consumption to a minimum
- With ecological refrigerant R290



CRYOSPACE PRO

- 27" LCD curved screen with real-time heads-up display and built-in camera
- 23.8" touch screen panel for operator
- Integrated Customer Management System via CryoSpace app.
- Available for both Hybrid and Active model



CRYOSPACE **HYBRID** HIGHLIGHTS

Most Economical Cryo System

Combining liquid nitrogen (for optimal treatment temperatures up to -194° Celsius) and an electric motor (saving up to 55% liquid nitrogen).

Designed To Keep It Cool

An automatic electric blind and certified cryogenic materials ensure minimal loss of cold escaping from inside the cabin.

Automate Your Precooling Schedule

Your CryoSpace will cool (and defrost) itself according to an automated schedule making it ready to use at your opening times.

Preprogrammed Treatments

Help and advise your clients with preprogrammed treatments based on scientific research.

Uses Electric Motor For Standby Mode

Minimize your cost when waiting for your next customer.

CRYOSPACE **HYBRID** FEATURES

Remote Maintenance And Diagnostics

Through WiFi connected system, including software updates

LED lighting

Colortherapy: where each color of the LED lights correspond with a specific treatment

Built-in Soundbar

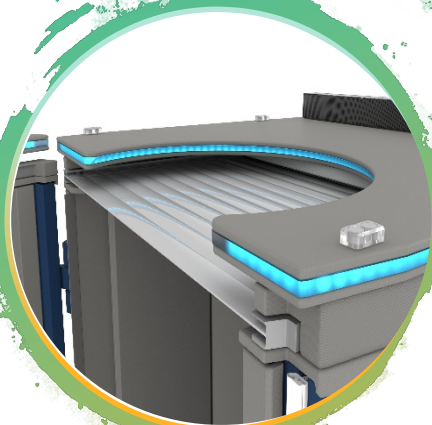
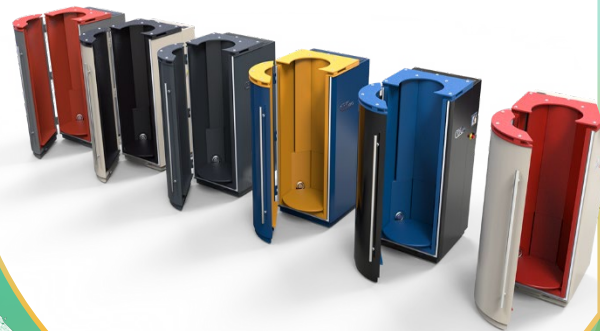
Play your favourite music for in the cryo

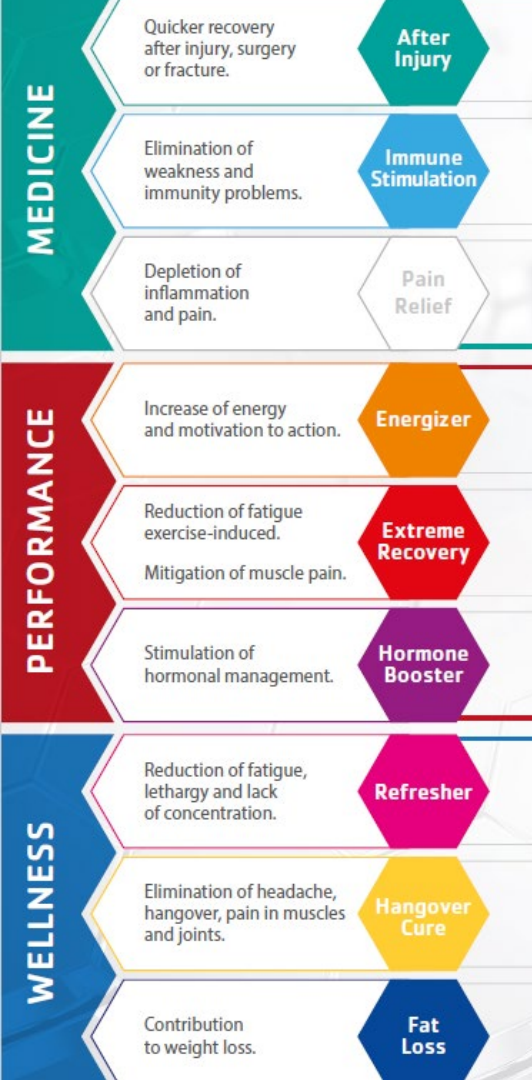
Wide Standard Color Selection

8 standard inside and outside colors and optional custom color selection and logo

Ergonomics, Compact And Modular Design

CryoSpace will fit through any door (80cm) and is suitable for a wide range of users in terms of length (155-210 cm) and weight (max 150 kg)





CRYO SPACE[®]

MENU

TREATMENTS BASED ON MEDICAL RESEARCH

Give your customers the best results with our unique system of preprogrammed treatments. Each treatment is based on years of know-how and medical research which determines the intensity, duration and frequency of the treatments based on the desired goal.

CRYOSPACE HYBRID PRO

The next generation of CryoSpace with additional focus towards User Experience.

FEATURES:

- Heads-up display (27" LCD curved screen) with live session information for customer
- Built-in camera to take photos during treatment and for customer monitoring
- Integrated Customer Management System via CryoSpace Application
- 23.8" touch panel for operator
- Presence sensor for additional safety



CUSTOMER MANAGEMENT SYSTEM:

- Automation of post-treatment report sent to customer via email (including photo made during treatment)
- Customer statistics and treatment history
- QR code login for customers
- Printer and tablet integration
- Educational animations for users and operators
- CRM and other software integration

THE COOLEST PLACE ON EARTH

„JBG-2” Sp. z o.o.

+48 32 720 41 08

cryospace@cryospace.eu

www.cryospace.eu

ul. Gajowa 5, 43-254 Warszowice

Poland