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FROOZER - Cryotherapy with liqid nitrogen

Product short description:

FROOZER is a professional medical device designed for **targeted local cryotherapy** utilizing a sub-zero stream of vaporized liquid nitrogen reaching down to **-160 °C**.

Key Clinical Highlights:

- **Rapid Analgesia & Thermal Shock:** Immediate reduction of acute pain, swelling, and localized inflammation.
- **5-Step Airflow Control:** Precision-regulated cryogenic stream with low LN2 consumption (3–10 kg/h).
- **Touchscreen & 31 Presets:** Intuitive operation with dedicated clinical protocols and custom memory.
- **30L Dewar Vessel:** High-capacity mobile cylinder with lockable wheels and acoustic safety alarms.

Product gallery:

Product description:

Targeted Local Cryotherapy

FROOZER

Sub-Zero Liquid Nitrogen Vapor System (-160 °C)

- ? **Ultra-Low Temperature:** Sub-zero vapor stream down to -160 °C for deep neuro-reflexive response.
- ? **Precise Airflow Modulation:** 5-step digital airflow control for customized therapeutic intensity.
- ? **Pre-Programmed Clinical Protocols:** Color touchscreen with 31 preset indications and custom user memory.
- ? **Continuous Clinical Workflow:** Standard 30-liter Dewar vessel with rapid cylinder swap capability.

Physiological Mechanism & Clinical Efficacy

Targeted cryostimulation triggers profound biological reactions through thermal shock

Immediate Analgesia

Extreme temperature drop causes rapid thermal shock that temporarily dampens nociceptive nerve conduction velocity, providing instantaneous pain relief and triggering endogenous endorphin release.

Reactive Hyperemia

Initial intense vasoconstriction is followed by prolonged reactive vasodilation (Hunting reaction), markedly improving microcirculation, lymphatic drainage, and cellular metabolite clearance.

Reduction of Hypertonia

Significantly reduces neuromuscular spindle activity and skeletal muscle spasticity, facilitating post-traumatic rehabilitation and restoring functional range of motion.

Engineered for Safe & Intuitive Operation

Thermally Insulated Flexible Applicator

Ergonomically designed, lightweight delivery hose with directional nozzle allows precise aiming of the cryogenic stream to specific anatomical areas while protecting the operator from cold exposure.

Intuitive Touchscreen Interface

Features a vibrant, clear touchscreen with a dedicated database of 31 evidence-based medical treatment programs, plus empty slots for individualized practitioner regimens.

Acoustic & Optical Safety System

Equipped with automated sensors providing audible alarms upon low nitrogen levels in the vessel and an acoustic chime signaling the conclusion of the programmed treatment duration.

Mobile Clinical Chassis

Sturdy medical trolley base equipped with four high-durability swiveling wheels and dual-action foot brakes ensures silent, effortless transport between treatment cubicles.

Clinical Video Presentation

Watch the FROOZER liquid nitrogen system in therapeutic operation

Primary Clinical Indications

Orthopedics & Sports Medicine

- Acute musculoskeletal trauma (sprains, contusions, ligament strains, muscle tears)
- Post-operative joint rehabilitation and swelling management
- Tendinopathies, epicondylitis (tennis/golfer's elbow), Achilles tendonitis
- Overuse syndromes and post-exercise recovery protocols

Rheumatology & Neurology

- Rheumatoid arthritis (RA) and ankylosing spondylitis (AS)
- Periarticular inflammation, bursitis, and synovial inflammation
- Reduction of muscle spasticity and hypertonia during neurological rehab
- Chronic spinal pain syndromes, sciatica, and neuralgia

Technical Specifications

Parameter	Specification
Cryogenic Agent	Liquid Nitrogen (LN2)
Maximum Vapor Stream Temperature	Down to -160 °C (-256 °F)
Airflow Intensity Levels	5-step digital regulation
Nitrogen Consumption	3 to 10 kg/h (continuous mode, depending on airflow step)
Cryogenic Cylinder Capacity	30 Liters (Dewar flask with quick-coupling interface)
Therapeutic Programs	31 factory clinical presets + user-definable custom slots

Display & User Interface	Color Touchscreen with intuitive graphic navigation
Safety Alarm System	Acoustic/visual low LN2 level indicator & end-of-treatment timer signal
Dimensions (L × W × H)	900 × 500 × 1100 mm
Total Weight	Approx. 70 kg (including full cylinder)
Power Supply & Consumption	230 V / 50 Hz | 500 W
Operating Ambient Conditions	Temperature: 10 – 35 °C | Humidity: 30 – 75% | Atmospheric Pressure: 700 – 1060 hPa
Mobility & Chassis	4 medical-grade swiveling castors equipped with individual wheel locks

Product codes:

Reference: 06.501.006
EAN13: -
UPC: -

Product features:

Product attributes: