

**10 – 35 °C**  
**HILOTHERM**  
**Clinic® + Professionell®**  
**+ HomeCare®**  
**for the prevention of swellings,**  
**haematomas, inflammations**  
**and pain**

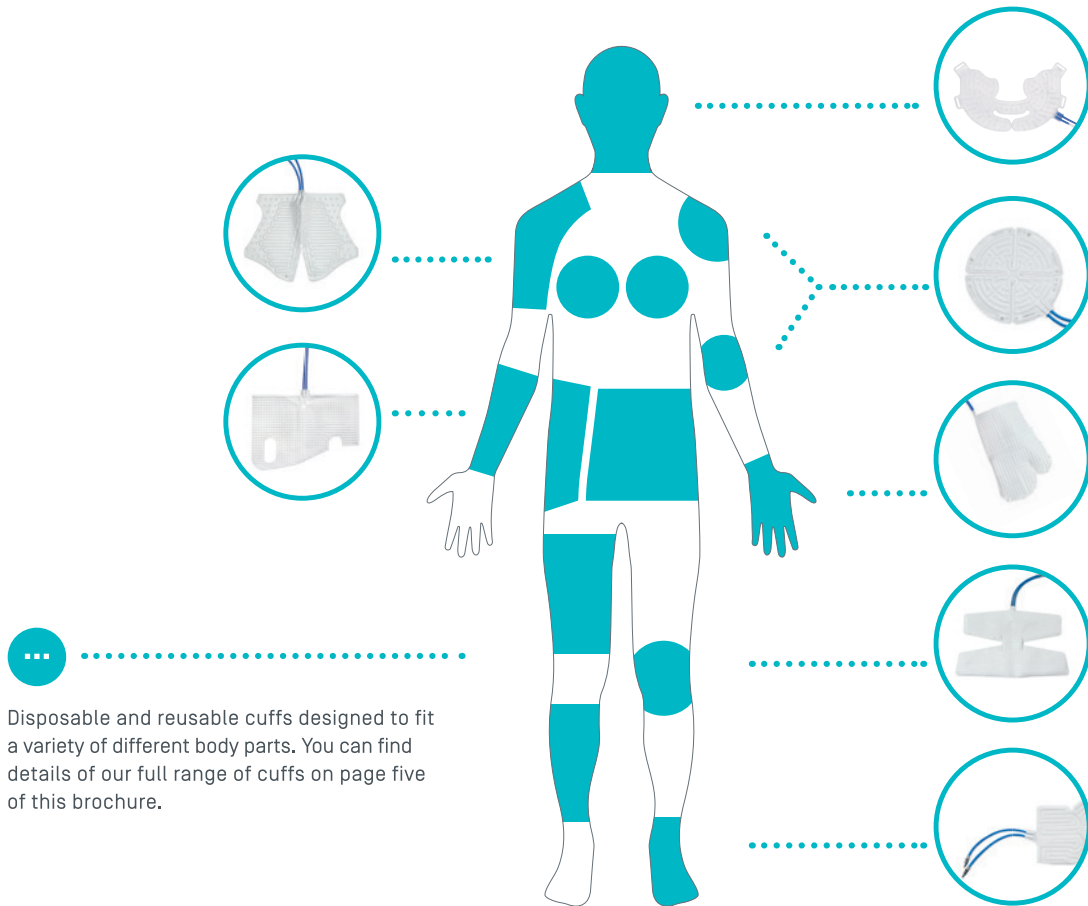
10 – 35 °C

**HILOTHERM Clinic® + Professionell® + HomeCare®**

## The controllable thermo therapy

Edemas and internal bleedings disrupt the supply of oxygen and nutrients to the injured or rather traumatised tissue which leads to disturbances of the blood circulation and an overheating due to inflammations.

HILOTHERAPY® helps to reduce or prevent these symptoms.



### Benefits

- + Accelerates the healing process.
- + Lowers pain intensity, meaning less medication is required.
- + Reduces inflammation and diminishes its symptoms.
- + Adjustable temperature which can be tailored to the patient's needs.

### How it works

The thermal effect is produced by cooling distilled water to a specific temperature in state-of-the-art therapy devices. Sensors routinely scan the relevant figures to ensure temperature consistency and devices can be used for hours, or even days, at a time without any deviation. The cooled water flows through a closed-loop system and pumps around anatomically-formed, cuffs that have been designed to fit a variety of different body parts. All cuffs are available in disposal or reusable (only for orthopedics) form.

**HILOTHERM Clinic®**, **Professionell®** und **HomeCare®** are the three devices that have been developed for the implementation of **HILOTHERAPY®**.

**10 – 35 °C**

**The therapy device HILOTHERM Clinic®**

- Particularly suitable for the clinical field of application, pre- and postoperative
- Allows two cuffs to be attached that means the treatment of two patients or two different body parts at the same time is possible
- Long-term usage at a constant temperature [sensors keep the adjusted temperature constant]
- Coolant: distilled water
- Weight: empty weight: 10 kg ; operating weight: 12 kg
- Dimensions: 430 x 275 x 268 mm



**12 – 22 °C**

**The therapy device HILOTHERM Professionell®**

- Ideal for use on the move e.g. in a practice, sports club, at home or in hospital.
- Accelerates recovery from injury, surgery, chronic inflammation and pain.
- Allows 1 cuff to be connected
- Long-term usage at a constant temperature [sensors keep the adjusted temperature constant]
- Coolant: distilled water
- Weight: empty weight: 4.3 kg, operating weight: max. 4.8 kg
- Dimensions: 240 x 260 x 260 mm



**15 – 22 °C**

**The therapy device HILOTHERM HomeCare®**

- Ideal for use on the move e.g. in a practice, sports club, at home or in hospital.
- Accelerates recovery from injury, surgery, chronic inflammation and pain.
- Allows 1 cuff to be connected
- Long term operation at a constant temperature [sensors maintain the configured temperature]
- Coolant: Distilled water
- Weight empty weight: 2.9 kg; operating weight: max 3.4 kg
- Dimensions: 240 x 260 x 260 mm



Information

## HILOTHERAPY® – a thermal healing treatment

to promote the healing process of damaged tissue

Swelling, inflammation, oedemas, haematomas and internal bleeding are common after surgery or injury. Not only does HILOTHERAPHY® accelerate the healing process but it also relieves pain, meaning less medication is required.



### Findings about the role of oxygen and nutrient supply

Due to surgical interventions or injuries the supply of oxygen and nutrients to the tissue gets massively disturbed. The accelerated metabolic rate causes hyperthermia due to inflammation of the affected tissue combined with disturbances of the blood circulation. The need of oxygen increases dramatically.

### Consequences:

The damaged area is no longer supplied with the necessary amount of oxygen needed for maintenance and regeneration.

Due to this lack of oxygen, further cells die off and liquid-binding proteins become free which causes additional oedemas to form. This starts a vicious cycle which can lead to hypoxic damage.

### Medical Requirement:

**The oxygen requirement of the damaged tissue needs to be reduced.**

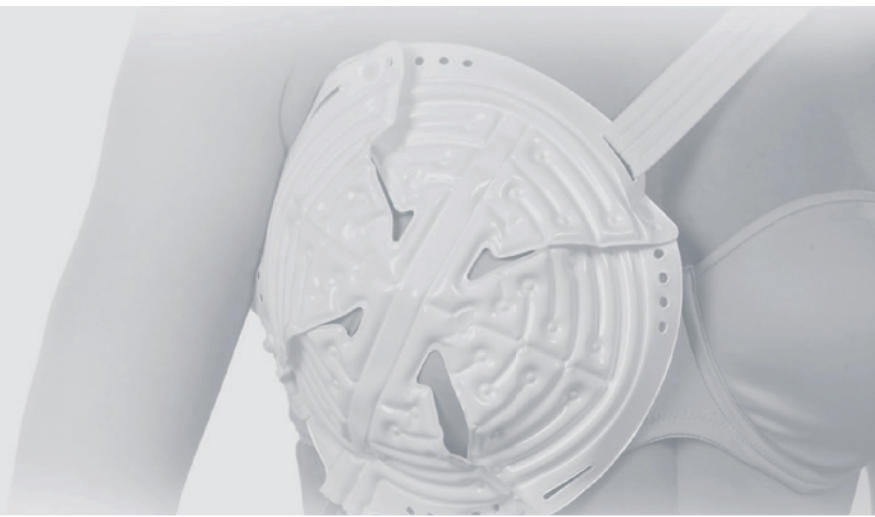
HILOTHERAPY® is intended for traumatic pre and postoperative indications

#### Medical sectors

- Traumatology / orthopedics
- Oral and Maxillofacial Surgery
- Otolaryngology
- Plastic / Aesthetic Surgery
- Implantology
- Rheumatology
- Oncology
- Vascular and Microsurgery
- Dermatology
- Urology
- Sports Medicine
- Emergency Medicine
- General post-operative wound healing
- Physiotherapy / Rehabilitative medicine

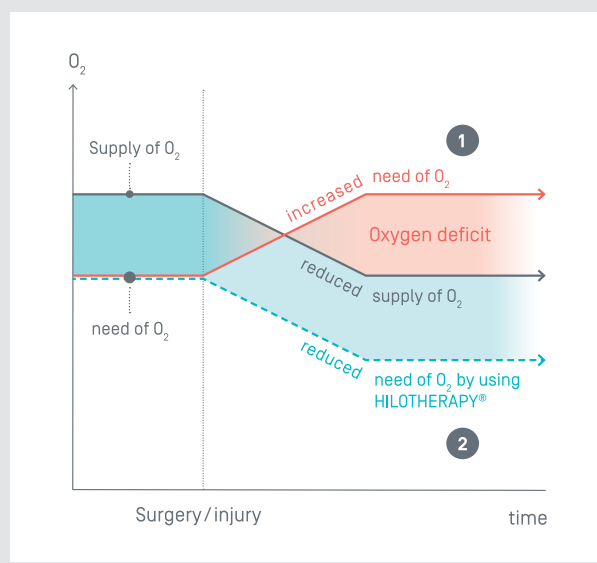
#### Treatment areas

- Oedemas
- Haematomas
- Pain relief
- Sprains
- Pulled muscles
- Muscle ruptures
- Dislocations
- Tendinitis
- Inflammatory Rheumatism
- Hand-Foot Syndrome
- Sciatica
- Fever
- Migraine
- Functional rehabilitation, e.g. improvement of mobility and loosening of the muscles



### The Effect of HILOTHERAPY® on the Oxygen Requirement

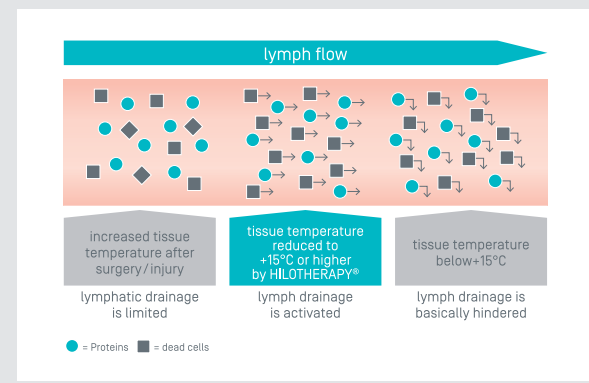
Dropping the temperature of the affected tissue by 10°C reduces the metabolic rate by 50%. It also reduces the oxygen requirement so that the amount of oxygen that reaches the injury is sufficient for regeneration



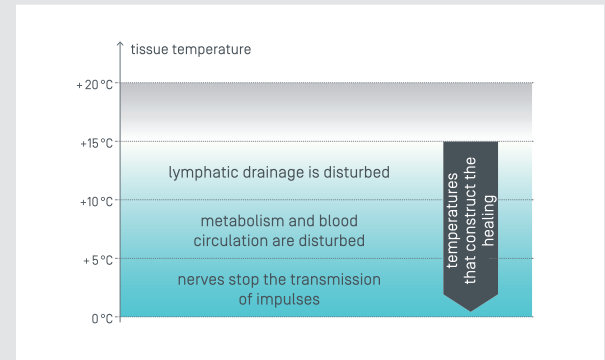
- 1 **Oxygen deficit:** With a reduced supply and an increasing need a deficit occurs which leads to additional damage of the tissue.
- 2 **Oxygen adjustment:** HILOTHERAPY® reduces the oxygen requirement and enables the way for regeneration.

### The Effect Of HILOTHERAPY® on the Removal of Pollutants

In order to guarantee the transportation of pollutants through lymphatic drainage, the temperature of the tissue must also be reduced. It is of particular importance, however, that it is not reduced below 15°C, otherwise lymphatic drainage is hampered.



**Oxygen deficit:** With a reduced supply and an increasing need a deficit occurs which leads to additional damage of the tissue.



Risks of incorrect tissue temperature

# Anatomically Engineered Cuffs to Suit Your Needs

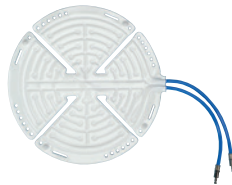
Depending on the indication and the affected part of the body, specific cuffs are available which have been specially designed with a delicate system of capillaries. This ensures the uniform impact of the temperature on the damaged tissue. We are happy to advise which cuff would be most suitable for you.



## Disposal and Reusable Cuffs for orthopaedic surgery



Lower leg cuff



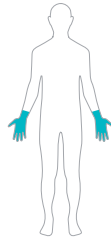
Round cuff



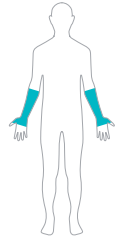
Small round cuff



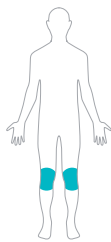
Breast cuff *Hilobreast*



Hand cuff



Forearm Cuff



Knee cuff



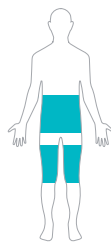
Foot cuff



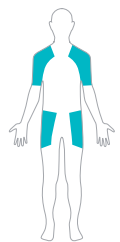
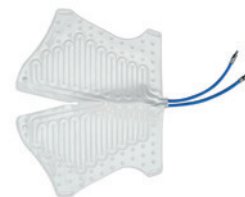
Foot cuff Slipper



Small surface cuff



Large surface cuff



Trapezoidal cuff

Only available as disposal cuffs



Head cuff



Lower face cuff with link



Lower face cuff without link



Upper face cuff



Eye cuff open



Eye cuff closed




Nose cuff



Nose cuff T-cast



**Our range of products:** HILOTHERAPY® – Temperature-controlled thermo healing



**10 – 35 °C**  
**HILOTHERM Clinic®**  
**12 – 22 °C**  
**HILOTHERM PROFESSIONELL®**  
**15 – 22 °C**  
**HILOTHERM HomeCare®**  
Prevention of swellings,  
hematomas,  
inflammations and pain



**15 – 22 °C**  
**HILOTHERM Rheumatism**  
Pain relief from  
rheumatism



**10 – 12 °C**  
**HILOTHERM ChemoCare®**  
Prevention of  
Polyneuropathy [CIPN] and  
Hand-Foot Syndrome [HFS]



**35 – 43 °C**  
**HILOTHERM Calido®**  
Heat therapy for  
tissue dissections and  
transfers



**HILOTHERAPY®**

HILOTHERAPY® is a thermal healing treatment that operates in a localised manner on damaged parts of the body and affects the oxygen requirement, the metabolism, the blood circulation and the pain receptors of the affected tissue. In the form of cryotherapy, it has a slow-down effect, and a stimulatory effect with hypothermia. The HILOTHERAPY® allows such effects while offering temperature controllable to the nearest degree, relative to the respective indication, within the specified temperature range.



**Is ice really a pain killer?**

HILOTHERAPY®'s ability to maintain a constant temperature, gives it an essential advantage over conventional alternatives such as ice gloves etc ... These will thaw and lose their cooling effect, meaning they need to be changed throughout the treatment process. Patients who are exposed to these alternatives also risk developing skin burns, due to the extremely cold temperatures.