

lympa-mat®

GRADIENT 12

Gradient intermittent compression
for specific treatment of lymphatic oedema

12-chamber-system

- gradient treatment pressure
- overlapping air chambers
- pneumatic controlled system



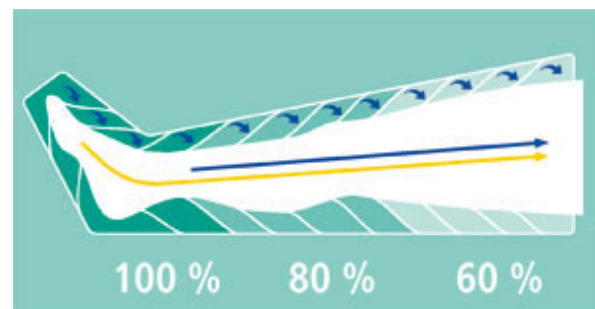
The Gradient System

Next to manual lymphatic drainage, intermittent pneumatic compression has been firmly integrated into up-to-date physical decongestion therapy. Its effectiveness is demonstrated and documented in numerous studies.

The 12-chamber system **lympa-mat® GRADIENT** has been established and successful for many years. It is known worldwide for its pneumatic pressurization with the gradient principle, and for its overlapping air chamber system integrated in the treatment sleeves.

lympa-mat® GRADIENT is suited for all kinds of limb oedema, having its focal point in the treatment of lip-oedema, lymphatic oedema and mixed forms – in clinical, ambulant and domestic fields.

Pressure gradient generates a physiologically efficient pressure decline. Thus the fluid mobilized in the high pressure range (100%) may pass unhamperedly through the low pressure levels (80% and 60%). A significantly minimized pressure at the sleeve's end relieves the adjacent drainage area and is highly positive on lymphatic oedema.



The concept of gradient intermittent compression is a result of extensive medical research. It was developed following the manufacturing of compression stockings and thrombosis stockings.

The air chambers have hand's breath and overlap at 50%. In combination with gradient pressure they prevent interchanging flowing which has an unphysiological strain on the valves, and effectively promote the venous and lymphatic reflux. The tissue is decongested, metabolism and gas exchange are significantly improved.

The convincing therapy results of **lympho-mat® GRADIENT** set new standards in pneumatic decongestion therapy.

The principle

In one compression cycle, a sleeve's twelve overlapping chambers are filled with air in succession, ascending in a distal direction.

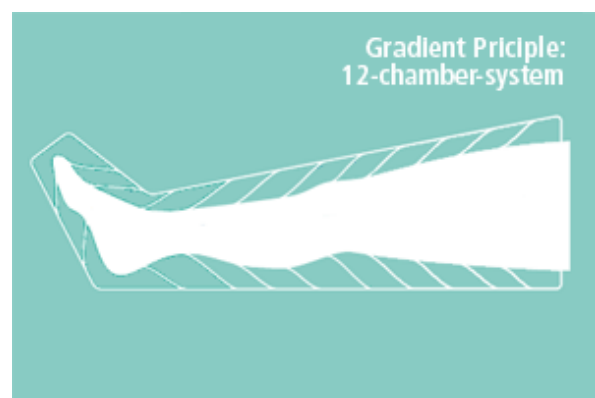
Chambers 1-4 to 100%, chambers 5-8 to 80%, chambers 9-12 to 60% of the set pressure. All the chambers remain filled with air until the last chamber has attained the desired pressure. The air is then released simultaneously from all twelve chambers, and after an interval the inflation cycle begins once again.

The Treatment Sleeves

The up-to-date and easy-to-use treatment sleeves result from our more than 25 years of experience in the field of intermittent compression.

Our sleeves consist of only high-quality materials which are extremely robust, easy to clean, disinfectable and fully tolerated by the body. They meet DIN EN ISO standards and thus pass strict biological tests.

The internal air chamber system contains twelve overlapping air chambers produced in long-life polyurethane. It is covered with a special textile which is dirt-repellant and easy to clean in daily use. Multiple plugs, zippers and Velcro



leg sleeve with 12 air chambers
full-length zip, Velcro fastening

Size M: thigh circumference 75 cm,
length 85 cm

Size L: thigh circumference 88 cm,

fastenings simplify the handling.

length 85 cm

special sizes available

If additional decongestion of abdominal and pelvic area is required, the 24-chamber-compression trousers or a combination of hip and leg sleeves is recommended.



arm sleeve with 12 air chambers
Velcro fastening

upper arm circumference up to 58 cm, length 71 cm

special sizes available



compression-trousers with 24 air chambers

hip circumference up to 150 cm

thigh circumference 83 cm

3 full-length zips



hip sleeve with 6 or 12 air chambers
variable Velcro fastening on front and rear
separate air chamber for the groin

hip circumference adjustable up to 150 cm, length 38 cm
expansion fitting available





Expansion fitting with one air chamber
for 12-chamber leg sleeve
for 24-chamber compression-trousers
circumference expansion 13 cm

The Therapy Device

lympho-mat® GRADIENT means up-to-date and efficient decongestion therapy. The gentle and quickly noticeable effects of the **lympho-mat® GRADIENT** system make it one of today's preferential therapy devices. Easy handling and up-to-date therapy sleeves characterize this product, which has been valued by doctors and patients alike.

lympho-mat® DIGITAL GRADIENT is a perfected and high-performance therapy device for users in clinics and medical practices. Compression cycles, pressure loads, intervals and length of therapy are choosable according to the individual clinical picture. A patient-operated switch allows the interruption of therapy at any time, keeping the set treatment parameters.

lympho-mat® 300 GRADIENT, developed especially for domestic use, is robust and high-performing. The gradient pressurization decongests gently, and the fixed interval of 15 seconds gives time enough to exploit the lymphangiomotoric cycles.

Supportive Home Therapy

... is necessary in some cases and makes good economic sense. In case of chronic diseases, the therapy can be continued at home as directed by the doctor, providing considerable support. This reduces the number of physiotherapy sessions necessary and compensates in therapy-free periods. The patient is best equipped and can independently determine when to start the daily treatment. In case of acute complaints the patient can react instantly.

Home therapy is expedient in the case of increasing need of therapy, chronic syndromes, drug intolerance (e.g. diuretics), or intolerance of permanent compression.

Indications

- thromboembolic prophylaxis
- post-thrombotic syndrome
- ulcer cruris
- venous oedema
- post-traumatic oedema
- minor lymphatic oedema
- lipoedema
- mixed forms of oedema
- peripheral arterial occlusive disease
- under strict observation sensory disturbance caused by hemiplegia

Contra-indications

- decompensated cardiac insufficiency
- extensive thrombophlebitis,
- thrombosis or suspected thrombosis
- erysipelas
- severe unstabilised hypertension
- acute soft-part-trauma of extremities
- neuropath
occlusive processes in the sector of
lymphatic drainage

Technical Informations

lympa-mat® DIGITAL GRADIENT

- connection for 3 treatment sleeves
- simultaneous treatment of 2 legs and hip possible
- graduated pressurization
- membrane keyboard/digital display
- exact setting of the individual treatment parameters possible
- two-stage compression speed
- pressure setting 20 - 120 mmHg
- controller for setting the interval between compression cycles, 5 - 90 sec.
- integrated timer / automatic disconnection
- patient-operated switch (remote control)
- high-performance unit for continuous operation
- dimensions: w 37 cm, h 18 cm, d 25 cm
- weight: 6.1 kg



lympa-mat® 300 GRADIENT

recognized therapeutic aid

- connection for 3 treatment sleeves
 - simultaneous treatment of 2 legs and hip possible
 - graduated pressurization
 - pressure setting 20 - 100 mmHg
 - integrated timer / automatic disconnection
 - 15 sec. interval
 - dimensions: w 26 cm, h 16 cm, d 25 cm
 - weight: 4.6 kg
- 2 years device guarantee.
The units and treatment sleeves are maintenance-free.



- Certified Management System
- EN ISO 9001
- EN ISO 13485

