

MOTOmed®
move differently



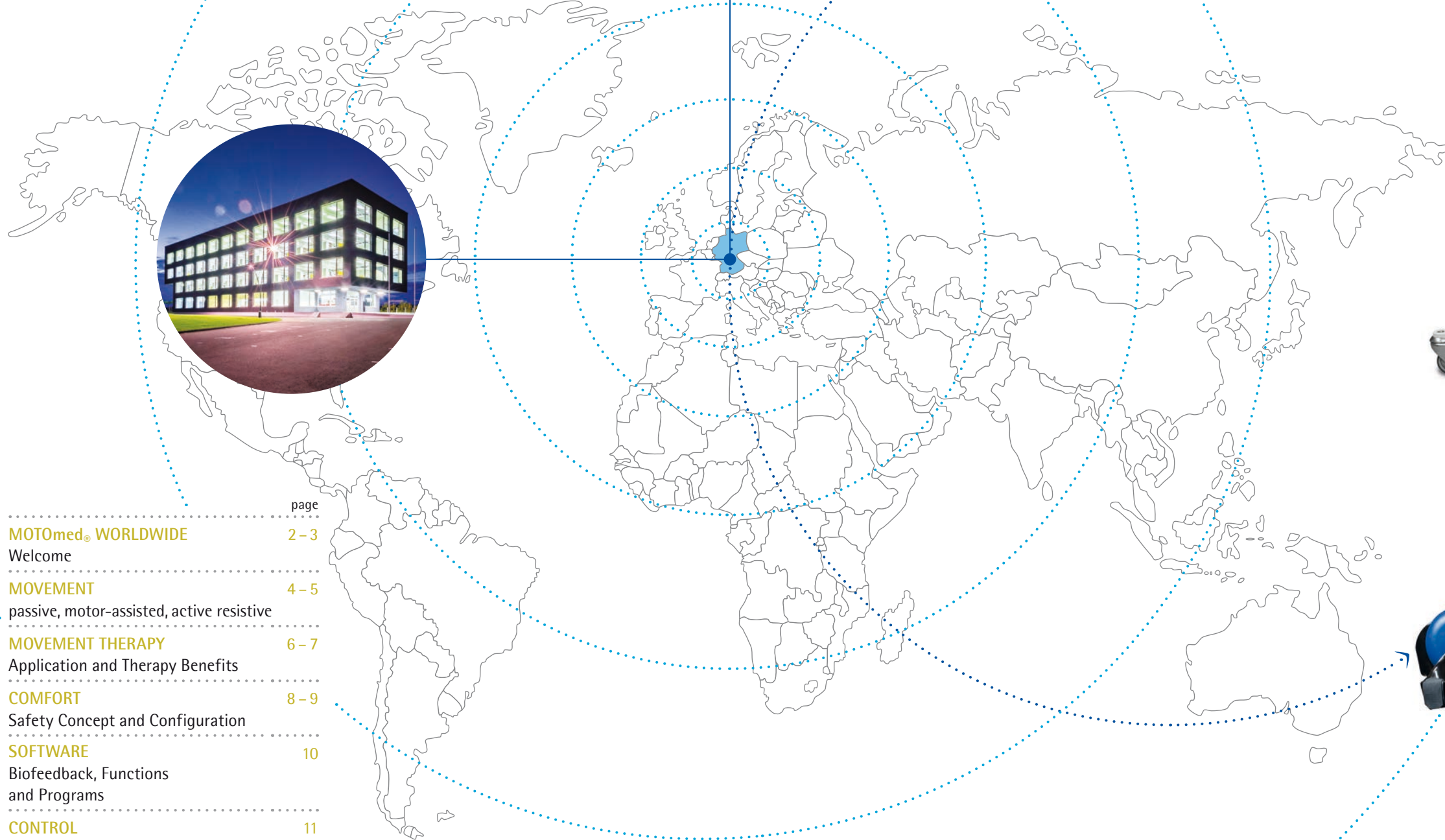
Movement Therapy in Supine Position

MOTOmed® letto2

RECK

Movement Therapy Devices

Reck
 Movement Therapy Devices
 GERMANY
 88422 Betzenweiler
 Reckstr. 1-5
www.motomed.com



MOTOmed letto2
 Movement of the legs



MOTOmed letto2 leg/arm
 Movement of the legs, arms
 and upper extremities

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MOTOmed letto2
 moves globally
 persons in
 medical facilities
 and in home
 surroundings.



MOTMed® – Getting active in supine position

The MOTMed letto provides supine patients the opportunity to engage in daily, motor-assisted movement therapy. This helps to prevent and counteract the complications of being bedridden. Movement improves blood circulation, stimulates nutrition, and the cardiovascular system and prevents muscle loss (atrophy) as well as joint stiffening (contracture-prophylaxis).

Scientific research confirms: Movement benefits

Movement therapy conducted from the hospital bed can lead to reduced stays in the intensive care, minimize ventilation time (weaning), prevents subsequent neuromuscular damage, helps improve the cognitive performance of the patients.



MOTMed® Movement Therapy

passive Passive training of the extremities maintains joint flexibility, loosens the muscles, supports blood circulation and prevents contractures (joint stiffness).

motor-assisted Any active impulse in the legs or arms is detected and supported by the ServoCycling feature (see pg. 8), which enables repetitive active rotations even with minimal residual muscle strength.

active resistive Allows for active training against 20 finely adjustable resistance levels, from very easy to difficult. Active training strengthens the leg, arm, and respiratory muscles, and therefore the cardiovascular system as well as the immune system.

MOTMed® – Improvement for your physical and cognitive state

Even short term confinement to bed tremendously decreases physical capabilities. Especially elderly persons have to face declining cognitive (mental) functions. The MOTMed Movement Therapy substitutes for the lack of movement in bedridden patients. If used regularly, it can optimally enhance the effectiveness of other therapies which leads to an overall improvement of well-being.

Areas of application

The MOTomed letto2 is a safe, software-controlled cycle movement device for lower and upper extremities which is effective for:

- Bedridden patients who are in facilities, nursing homes or in domestic environment
- Early mobilization in intensive care
- Passive mobilization of comatose patients or those with apallic syndrome (coma vigil)

For pediatric use

The »pediatric version« of the MOTomed letto2 model is equipped with smaller foot shells and leg guides. It also comes with a **reduced distance between the foot shells** (14 cm / 5.5 in. instead of 21 cm / 8.3 in.). This allows for a physiological movement pattern which prevents the strain on the child's hips and knee joints.

For hemodialysis centers

Regular physical activity improves the overall performance in patients undergoing dialysis treatment. It improves the effectiveness of the dialysis treatment and improves the patient's tolerance. The special construction of the MOTomed letto2 enables easy access to and use of all common bed or therapy chair models. The motor-assistance feature enables even very weak dialysis patients to train safely and actively on their own.



Therapy goals

- **Assistive tool for physical therapy**
Passive movement to assist the therapist to prepare the patient for manual therapy.
- **Regulation of muscle tone and spasticity**
Permanent reduction of muscle tone by means of smooth, uniform movement, and reduction of spasticity with the MOTomed MovementProtector feature including MOTomed SpasmControl.
- **Improved bladder and bowel function**
The indirect activation of the stomach and pelvic floor muscles can prevent complications such as constipation and urinary tract inflammations.
- **Early mobilization**
By utilizing the MOTomed ServoCycling feature for motor-assisted movement, even weak patients can be mobilized in a gentle and safe manner.
- **Stimulation of circulation**
Movement supports the mechanism of the muscle vein pump which helps with prophylaxis of thrombosis, edema and decubitus.
- **Maintaining mobility**
Regular MOTomed movement can help to prevent contractures and ease joint stiffness.
- **Weaning process**
The arm/upper body trainer in particular, can strengthen the respiratory muscles and supports weaning off ventilation.
- **Improving the well-being**
Movement improves the overall well-being. It has a motivational and mood-lifting effect.



MOTomed letto2
For an effective [hemodialysis treatment](#)



You can request a free special brochure or an overview of studies.



MOTomed letto2



Active and passive safety

MOTomed® Safety Concept

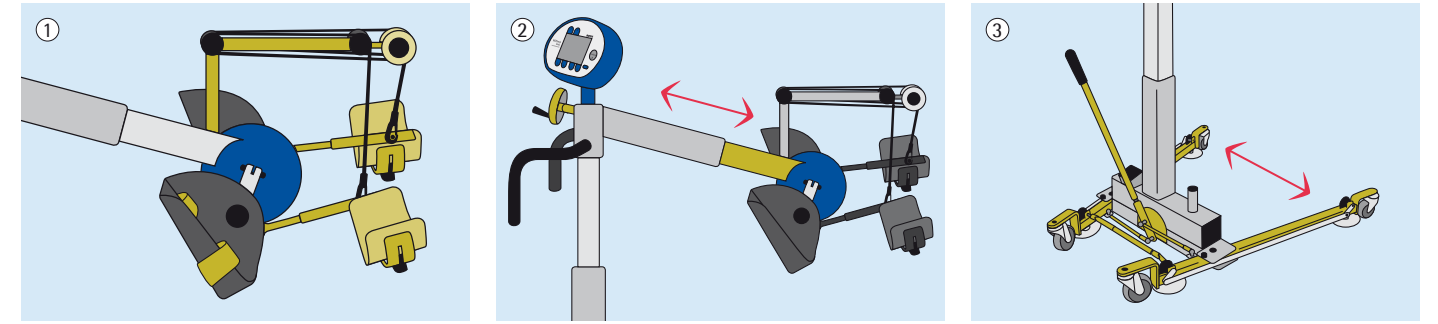
MOTomed MovementProtector with SpasmControl

The *MOTomed MovementProtector* monitors the muscle condition throughout the training session and stops the pedals once a sudden cramp occurs (spasticity), preventing injury to the lower and upper extremities. After a brief pause, the *MOTomed SpasmControl* will change the cycling direction. This process is repeated multiple times until the cramping has been relieved.

Unique and empowering

MOTomed® ServoCycling

The MOTomed can recognize even the slightest muscle impulse. When minimal muscle impulses are detected, the ServoCycling feature then assists with the pedalling. Thereby, it enables individuals to train actively even with minimal residual muscle strength. Residual muscle strength that may not be sufficient for a fully active movement can be discovered, applied and strengthened.



Individual adaptation

MOTomed® Equipment and Accessories

- ① **»TrainCare Comfort« including adjustable knee support**
Recommended for paralyzed, unconscious and weak patients. Safe hold and secure guidance of the legs with knee protection. Each leg's position can be independently adjusted. The legs are secured with elastic Velcro straps.
- ② **Knee bending adjustment including adjustment wheel**
Enables the range of motion of the knee or elbow joints to be easily adjusted even during the training session.
- ③ **Expandable chassis**
Avoid obstacles under the bed by simply adjusting the width (wider/narrower) of the tracks with a lever. Suitable for all common bed or therapy chair constructions.
- ④ **Hygiene solutions**
For areas requiring strict hygiene control fully disinfectable plastic-coated foot shells, leg guides and handles are standard feature. Disinfectable rubber securing straps are also available as an accessory.

Increased safety with the patient remote stop button



Motivating and target-oriented MOTOmed® biofeedback, functions and programs

Always well informed: Biofeedback

Different biofeedback screens present the patient or the therapist with continuous activity feedback which helps to control the training and to effectively better correct the training patterns of the patient.

Biofeedback, e.g. in hemiparesis: SymmetryTraining

The integrated 2-bar-diagram lets you track the applied strength with the left vs. the right side of the body. Particularly hemiplegic patients (e.g. stroke recovery) profit greatly from this sensory-motor perception and coordination training.

Fun and Games: MotivationProgram

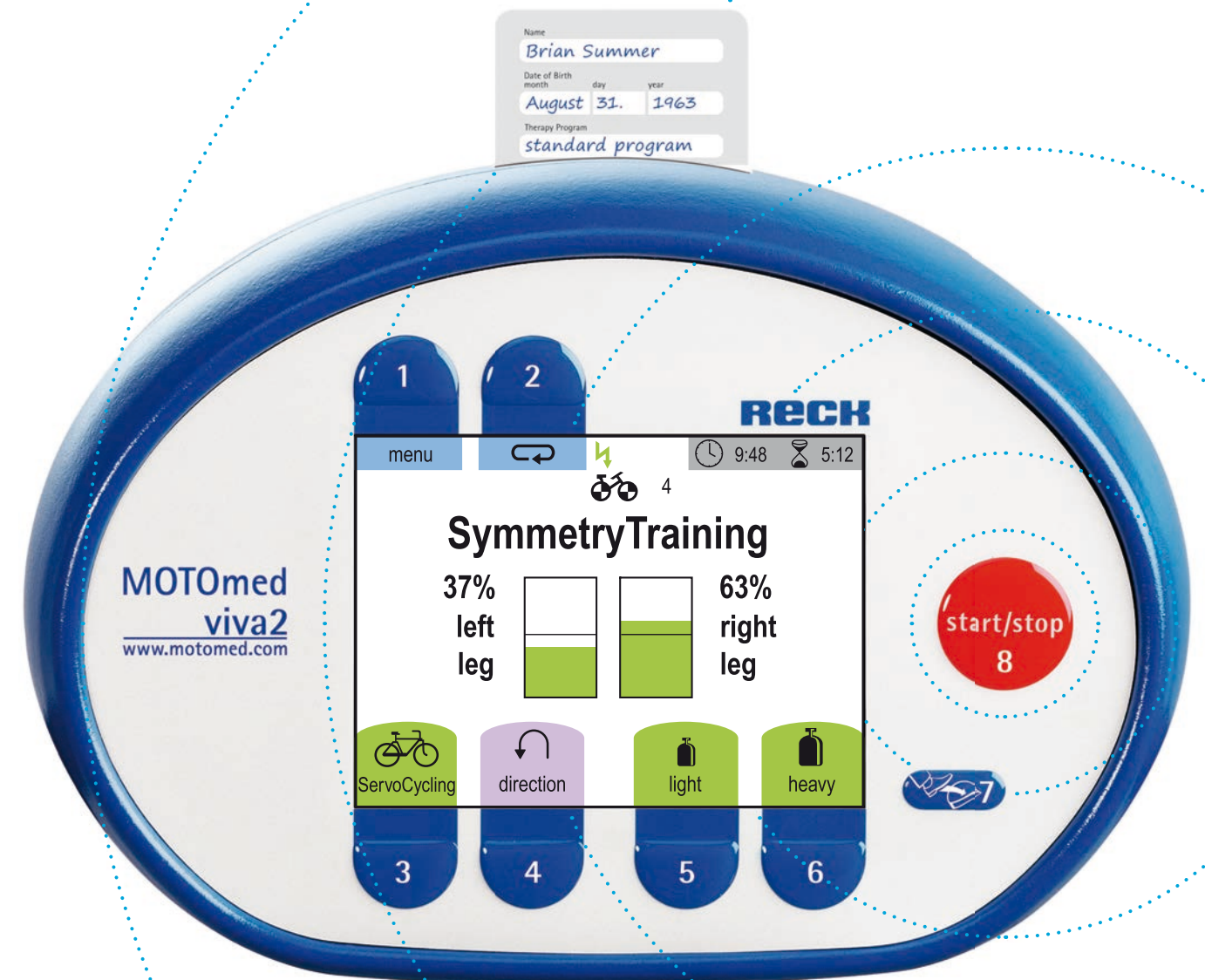
It combines the different forms of coordination, concentration, strength and endurance training into a fun therapy session. By applying targeted strength from the left and right extremities, the user can guide the game character MOTOmax into reaching a higher level where more stars can be collected. The user is rewarded with jumps for joy, champion points and stars which motivates to engage in regular training.

Targeted and Comprehensive Training: CoordinationProgram

There are 15 training sessions (segments) available that contribute to a diversified and interesting training by engaging the user's concentration, coordination, strength, and endurance. The user can start off with simple sessions and move up from there.

Simply convenient: individualized training programs

You can choose one of the TherapyPrograms in accordance to the medical condition and the therapy goal (e.g. better mobility, strengthening, endurance, coordination). The expert mode allows you to adapt or change each program to your individual needs, directly from the operating panel.



Smart and intuitive

The MOTOmed® Operating Panel

For any user, a simple and comfortable control of the training session is one of the most important criteria. You will find this with the MOTOmed operating panel: The big, easy-feel buttons help you to navigate through the menus very intuitively. For an easy user guidance, the next user prompt is marked in green. The tips and menu prompts are displayed in big, legible font. All the operating prompts and the training feedback can be displayed in 27 different languages.

Legs

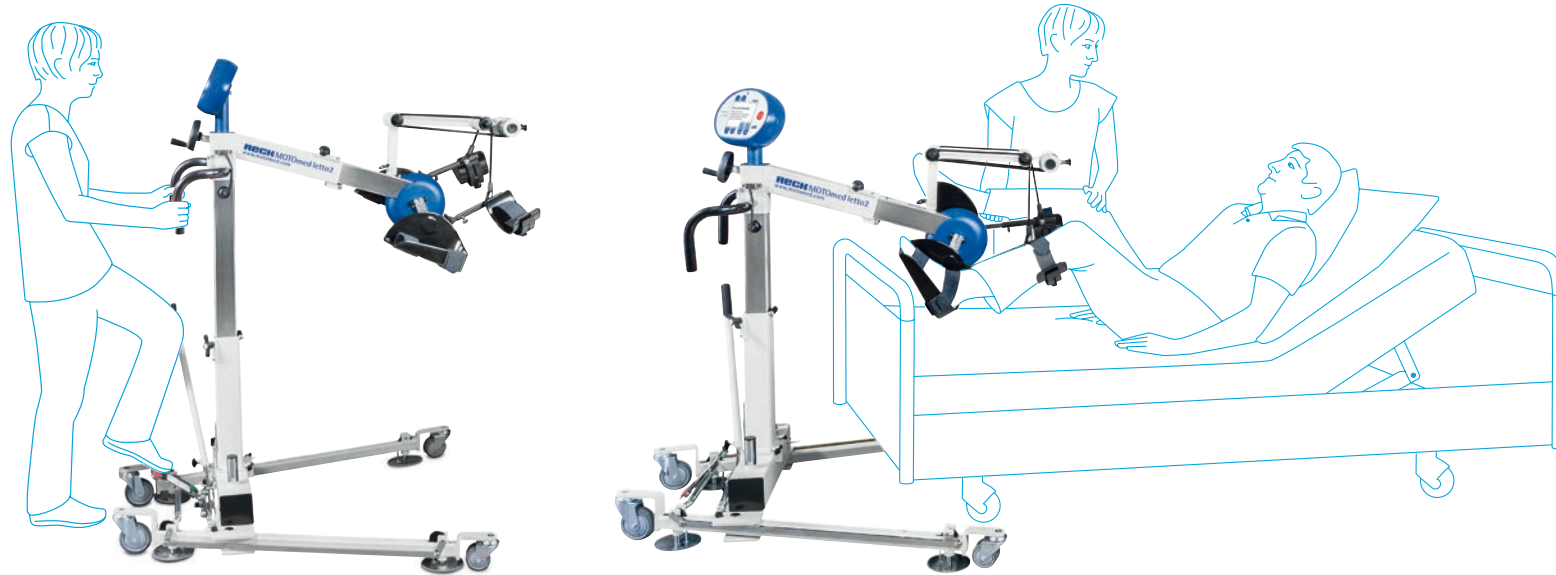
Leg training made easy MOTOmed® letto2

Everyday Flexibility

The four big transport castors give the MOTOmed letto2 the mobility that is required in a daily hospital routine. Different MOTOmed letto2 chassis options and the spring supported height adjustment assure optimal adaption to different bed or chair constructions.

With the flexible *floor fixation (also called the 4-Brake-Stop)* the unit can be easily secured in place, without having to attach it directly to the bed. The position of the knee joints is easily adjustable with the *knee bending adjustment*, either after inserting the legs or even during the training.

Handling



Use the **4-Brake-Stop floor fixation** to securely position the MOTOmed letto2 unit

Simple **foot insertion** before the training

Simple **start and finish** of the training with the user-friendly operating panel

MOTOmed letto2 Technical specifications of the basic model:
 measurements: 126 – 156 cm / 49 – 61 in. (h) x 55 – 85 cm / 21.7 – 33.5 in. (w) x 117 cm / 46 in. (d); weight: approx. 63 kg / 139 Lbs.,
 chassis inside: 43 – 73 cm / 16.9 – 28.7 in.; height adjustment (max bed height): from approx. 72 cm – 102 cm / 28.3 – 40.2 in.;
 chassis height (ground clearance for bed units): 14 cm / 5.5 in.
 mains Voltage: according to country specifications; frequency: 50 Hertz; construction: all-metal construction, medical device class MPG IIa

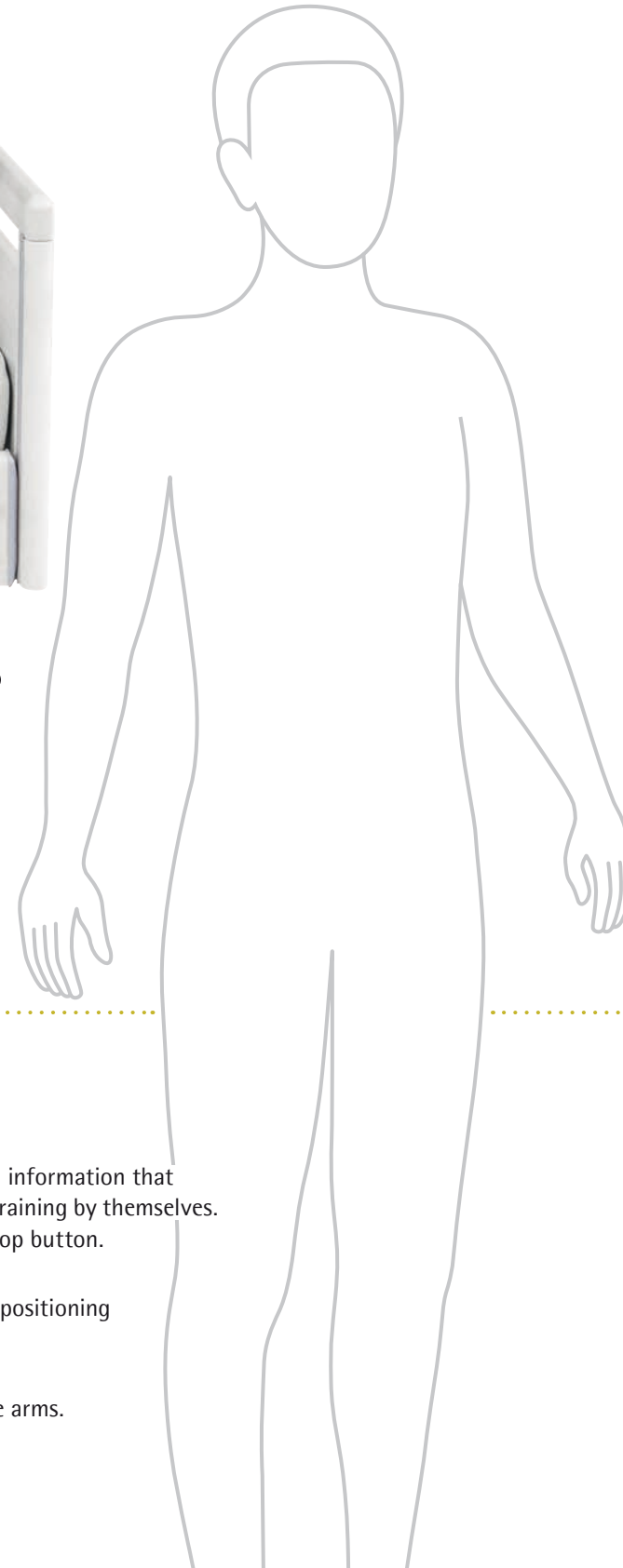
Standard Configuration MOTOmed letto2

- ① **Safety foot shells**
For a safe foot hold. Also available with optional disinfecting plastic coating.
- ② **Big transport castors**
For more mobility and flexibility.
- ③ **Floor fixation**
Stable position during the training.
Patient remote stop button (see pg. 9)
For a better user safety.

Recommended accessories

- ④ **Knee bending adjustment including adjustment wheel**
- ⑤ **Detailed adjustment of the leg and arm bending angle.**
- ⑥ **»TrainCare Comfort«**
Safe and secure guidance of the legs.
Expandable chassis
Chassis adjustment for the optimal positioning to the bed or therapy chair.

Legs Arms

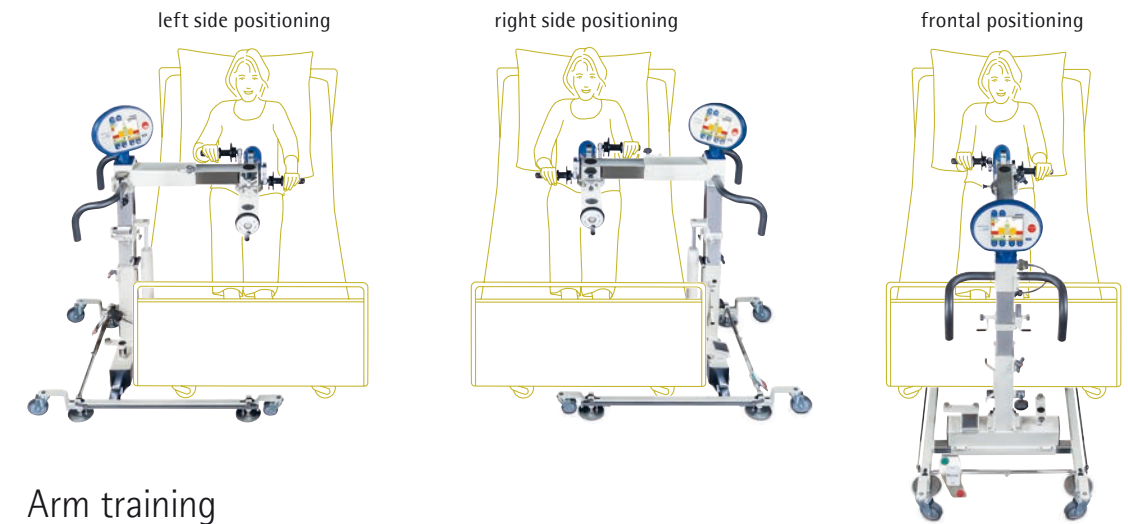


The all-round movement in supine position MOTOmed® letto2 leg/arm

In addition to the leg training, the MOTOmed letto2 leg/arm unit offers the option of arm/upper body training. This allows for training up to 80% of the skeletal muscles in supine position. Early mobilization can help to maintain the flexibility of the upper body (regulation of muscle tone and contracture prophylaxis) and to initiate basic movements (e.g. after a stroke). Arm/upper body training strengthens respiratory muscles and can so help to reduce ventilation time and length of a stay at the intensive care unit. A better lung function can improve the general condition of patients significantly. The MOTOmed letto2 leg/arm provides a comprehensive therapy in the supine position.

Convenient use: Application from three bed sides

Depending on the desired training option (leg or arm training) or whether the user is bound to space limitations, the MOTOmed letto2 leg/arm can be positioned from the left or the right side, or at the foot part of the bed (frontal).



Arm training

Get motivated by receiving feedback

MOTOmed letto2 leg/arm basic configuration
(additional accessories to the MOTOmed letto2 basic model)

Safety foot shells (leg training).
Handles (arm/upper body training).

- ① **Knee bending adjustment with thumb wheel**
Exact adjustment of joint bending in legs and arms.
- ② **Quick release system**
No tools required to switch between foot shells and handles.
- ③ **Accessory storage**
For the storage of foot shells, handles/forearm shells and »TrainCare Comfort« leg guides.
- ④ **Hydraulic height adjustment**
Easy adaptation of optimal training height.

Recommended accessories

- »TrainCare Comfort« (see pg. 9)
- ⑤ **Pivot arm**
Patients are able to follow training information that is displayed as well as control the training by themselves. This replaces the patient remote stop button.
- ⑥ **Expandable chassis**
Chassis adjustment for an optimal positioning to the bed or therapy chair.
- ⑦ **Forearm shell**
Safe guidance and fastening of the arms.
- ⑧ **Hand cuffs**
Soft cuff for securing the hands.

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chassis height (ground clearance for bed units): 14 cm / 5.5 in.; mains Voltage: according to country specifications;
frequency: 50 Hertz; construction: all-metal construction, medical device class MPG IIa

Become active!

Competent consultation Our team of consultants consists of more than 10 experienced certified sport scientists and physical therapists and occupational therapists. You can be confident that you will receive a competent consultation when it comes to choosing the right MOTomed model or the TherapyProgram that is most suitable for you.

Free trial! In most cases a trial period is necessary in order to test the effectiveness and benefits of this therapy. Your MOTomed partner can offer you the opportunity to test the device at your medical facility or at home.

Product presentation Your local MOTomed partner will be happy to arrange a product presentation for you. The presentation is non-binding and free of charge.

Renting Ask your local MOTomed provider about renting options available to you.

Purchase In order to quickly obtain your MOTomed Movement Therapy, in the most uncomplicated manner, talk with your MOTomed representative about different financing options available in your place of residence.

Get informed! Ask us about specific brochures, prices, studies, special product offprints, comprehensive pieces of literature or MOTomed videos (DVD).



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Your MOTomed partner:

RECK

RECK-Technik GmbH & Co. KG,
Reckstr. 1-5, 88422 Betzenweiler, GERMANY

phone +49 73 74-18 85, fax +49 73 74-18 80
info@motomed.com, www.motomed.com