

# MOTOmed

## Movement Therapy

Motor driven, software controlled MovementTherapySystems for people with paralysis, spasticity and physical weakness.



MOTOMed gracile (pediatric unit)



Arm/upper body trainer MOTOMed viva1



MOTOMed letto (bed unit)



with motor

MOTOMed viva2

## Get yourself moving...

with the MOTOMed MovementTherapy: at home, in rehabilitation or nursing facilities.

Become more flexible, ease spasms, enjoy warm and painless legs, promote walking ability, increase the sense of mental well-being and maintain independent living.

**RECK** MOTOMed®  
MovementTherapySystems

## Conditions:

Multiple sclerosis, stroke, paraplegia, tetraplegia, quadriplegia, cerebral palsy, Parkinson's disease and other neurological diseases as well as any kind of mobility impairment.

## Therapy Options

1

### Passive training with the motor

Legs and arms get moved by the motor. This kind of passive training has its positive effects particularly on spastic paralysed limbs or as a preparation for physical therapy. Legs and arms can be relaxed, the muscle tone can regulate itself and gradually decrease.

2

### Motor supported active training – ServoCycling

The function ServoCycling enables even users with very limited muscle strength to cycle actively (with the support of the motor). The patients apply their residual muscle strength and by means of the motor and specific software they will end up accelerating themselves in many cases.

Patients can start early in the rehabilitation process to apply and strengthen even the weakest muscle strength.

3

### Active training

This mode is an ergometer-like active training carried out with own muscle strength, against resistance. The resistance level can be adjusted in 16 (viva1, letto1), respectively 20 (viva2, gracile, letto2) finely graduated gears. The display gives feedback about the active performance (in approx. watt).

Passive training however can be very effective to warm-up and relax the muscles prior, during and after the active cycling.

## Therapy Goals

### Reduce spasticity, become more flexible

Loosen up the muscles in the case of sudden spasms as well as general stiffness.

### Rediscover residual muscle strength

Residual strength which is not apparent or insufficient for a complete movement can be rediscovered and applied.

### Counteract the consequences of a lack of movement

Such as circulatory problems (cold legs), stiff joints, shortened muscles, digestive problems, bladder problems, brittle bones (osteoporosis), build up of fluid in legs and ankles (oedema). Daily MOTomed MovementTherapy can avoid other unpleasant, costly and expensive therapies.

### Promote walking ability

The MOTomed training may build up and maintain the basic fitness required for walking (i.e. endurance and muscle strength), reduce limiting muscle stiffness and improve gait and confidence in walking.

### Strengthen the sense of mental well-being

Regular movement. Doing something for yourself. This has a positive influence on the sense of mental well-being.



MOTomed viva1



## MOTOmed viva1

The worldwide most purchased motorized MovementTherapySystem.

Even the basic model comes with many useful features. Several extensions are available according to your condition: Remote control rest, handlebar or the conversion to an arm/upper body trainer.

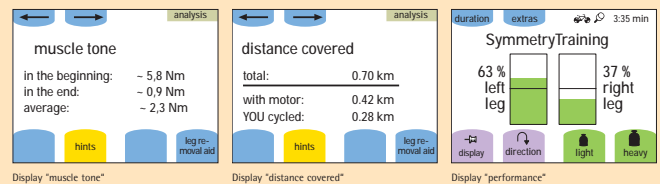


## MOTOmed viva2

The MOTOmed viva2 is particularly designed for wheelchair users and people with walking impairments having **additional limitations of the arm, hand and finger motor activity or impaired eye sight**.

The writing and graphics are easy to read on the large display (8.5 cm/3.4 in. x 11.5 cm/4.3 in.). The operating buttons are clearly legible due to their large size. In addition to the self-explanatory operating software the MOTOmed viva2 optimally supports an independent operation by the user.

Interesting training feedback is given on the display in a changing update format. The passive and active training modes and times are analysed separately.



## MOTOmed gracile12 (pediatric unit)



Specifically designed for the **needs of disabled children** (Cerebral palsy, spina bifida, muscular diseases).

The unique features of the MOTOmed gracile is the **extra small distance between the foot shells** (12 cm/ 4.8 in.) and the **infinitely variable height adjustment of the pedal axle**. Thus, it can be used by very small children and it adapts to the growth of your child.



MOTOmed letto2



MOTOmed letto1

## MOTOmed letto1/letto2 (bed unit)

## Arm-/upper body trainer



The MOTOmed viva1, MOTOmed viva2 and MOTOmed gracile12 (pediatric unit) also come with arm/upper body trainer. Various grips and fixations for arms and hands are available.

**For active and passive training of the arm, shoulder and back muscles.** Special feature: The arm/upper body trainer can be swivelled into and out of the training area.

The **TherapySystem on wheels for patients confined to bed**. The MOTOmed letto can easily be reached, fixed and adjusted to the bed without having to transfer the patient.

Ideal to be used in physical therapy, to initiate re-mobilization and to prevent contractures, pressure sores and thrombosis.

The TrainCare leg guides with adjustable knee protection (accessory, see picture above) enables also the mobilization of coma patients and patients with paralyzed legs. MOTOmed letto1 comes with a remote control, MOTOmed letto2 with a large color display.

Basic Equipment MOTomed	viva 1	viva 2	gracile12 (pediatric unit)	letto 1 (bed unit)	letto 2 (bed unit)
<b>Therapy options / training modes</b>					
- Passive movement of the legs by the motor	•	•	•	•	•
- ServoCycling = active cycling supported by the motor	•	•	•	•	•
- Active cycling against finely graduated gears	•	•	•	•	•
<b>Software / electronics</b>					
- 1 button operation	•	•	•	•	•
- SmoothDriveSystem for smooth, harmonious running	•	•	•	•	•
- MovementProtector, removes spasms sensitively	•	•	•	•	•
- SpasmControl with automatic change of direction, according to the therapeutic principle	•	•	•	•	•
- Electronic leg insertion and removal aid with safety stop	•	•	•		•
- SymmetryTraining – simultaneous feedback about the active performance of the left and right leg					
- Muscle tone analysis (muscle tone at the beginning, at the end, on average)	•	•	•	•	•
- Training analysis	•	•	•	•	•
- Upgradeability (by training programs, chipcard system, combination with the muscle stimulation (FES) etc.)		•	•		•
- Training analysis – visible training data and progress: During or after the training the following data is displayed:					
passive training:: - Speed (r/pm)	•	•	•	•	•
- Duration (min)	•	•	•	•	•
- Muscle tone (Nm)	•	•	•	•	•
- Distance covered (km)	•	•	•	•	•
active training: (ServoCycling) in addition					
- Energy (Joule/kcal)	•	•	•	•	•
- Right/left activity (Symmetry)	•	•	•		•
- Resistance (gears)	•	•	•	•	•
- Performance (approx. watt)	•	•	•	•	•
Passive and active training results are displayed separately (distance, time)		•	•		•
One single feedback information can be held on the display	•	•	•	•	•
<b>Technical features / mechanics</b>					
- Robust, stable all-metal construction, pull-out foot stand	•	•	•	•	•
- Velocity adjustment from 0 to 60 rpm	•	•	•	•	•
- Remote control with illuminated display, detachable with coiled cord	•			•	
- Large high-contrast display (8,5 cm/3.4 in. x 11,5 cm/4.3 in.)		•	•		•
- Stationary operating panel with 8 large, palpable buttons and self-explanatory operating software		•	•		•
- Extra button ServoCycling Transition from passive into active training mode can be felt and seen. Immediate feedback by a bicycle symbol indicates own activity. As soon as the user stops cycling actively the speed is reduced automatically.		•	•		•
- Large transport castors	•	•	•	•	•
- Softly padded safety foot shells with velcro strap fixation	accessory no. 501	•	•	•	•
- Pedal radius adjustment, two levels (7 cm/2.8 in. and 12,5 cm/5 in.)	•	•	•	•	•
- Handlebar provides secure hold during the training. Height and distance to the user can be adjusted without tools	accessory no. 504	•	•		
- Variable height adjustment of the foot shells for children and smaller persons in seating shells and wheelchairs			•		
- Distance between the inner rims of the foot shells in cm/in.	16/16.3	16/16.3	12/4.8	16/16.3	16/16.3
- Large range of accessories to the leg and arm/upper body training	•	•	•		
- Approved safety CE 0124, EMV, ISO quality management	•	•	•	•	•

## Contribute to Your Recovery – For Clinic and Home Use

Easy to use independently - from a chair or wheelchair.

The intelligent software of the MOTomed MovementTherapySystem simplifies the operation: By only pressing one single button the pleasant motion gets started.

Bicycle-like movement: slow or fast, forward or backward, passive with the motor or active with own muscle strength, against high or low resistance. Movement suitable for your needs. You can either pre-set your training time or stop any time during the training and select a different therapy mode.

All settings and programs can be operated comfortably via remote control (viva1, letto1) or the operating panel (viva2, gracile, letto2). Large buttons mirror your operation with acoustical signals. The display shows different data of the training process. A final analysis sums up your training progress.

The leg insertion and removal aid gives further support: It enables independent and simple insertion of the feet into the safety foot shells. At the touch of a button you can stop one pedal after the other at its lowest point or any other wanted position.

### Recognizing Spasms

The MOTomed MovementProtector recognizes spasms automatically. The motor gently stops moving the pedals.

Even the slightest signs of a cramp are recognized, as the MovementProtector (motor power) automatically adapts to the muscle tone (muscle tension).

### Easing and Relieving Spasms

After a spasm has been detected the SpasmControl automatically reverses the direction, until the spasm is relieved.

This is how stretching spasticity is eased by bending, and bending spasticity by stretching, just like during physical therapy. The SpasmControl makes the MOTomed MovementTherapySystem unique and safe.

## Various Accessories to Meet Your Individual Needs



#### Leg guides

Provide secure hold, with height adjustment. The spring mounted calf shells fit comfortably around the calves.



#### Self-operating foot holders

Helps to remove your legs quickly if required. Hold the feet securely – even with strong spasms.



#### Pedal radius quick adjustment

Change the pedal radius without tools to adjust the range of motion.



#### Forearm shells with arm cuffs

Fix and guide the arms safely during arm/upper body training.

## Your Mobility Motivates Us to...

... adapt the MOTomed MovementTherapySystem to the needs of people with physical disabilities – of any age, from children to the elderly. Decades of experience in construction, production and sales, as well as continuous cooperation with users, physicians and therapists have made RECK MOTomed the world market leader - we owe our success to our satisfied customers.

### Rediscover and Strengthen Your Residual Muscle Strength

The MOTomed ServoCycling function enables the user to reactivate even the smallest residual muscle strength.

The MOTomed encourages short impulses given by your arms or legs. This allows you to accelerate the pedals on your own. You feel your own activity and progress at once.

Residual muscle strength – you may not be aware of it but residual muscle strength can be discovered, activated and built up, even with hemiplegic paresis.



### Demonstrations

Are you interested in the MOTomed therapy? Try it out – at home or in a rehabilitation facility.

A demonstration gives you the opportunity to find out which MOTomed therapy goals are most suitable for you, your therapist and doctor. Just call us or send us the attached postcard. We will be happy to organize a demonstration for you.

### Train Actively Again

Difficulty getting up, high initial resistance, uncomfortable seating, interfering spasms, inharmonic pedalling, lack of coordination...

If you are one of those who only manage to use a normal ergometer with pain and risk, the MOTomed viva is an ideal solution for you.

After the legs have been relaxed and become more flexible through passive training, you can start cycling actively from the comfort of a chair or wheelchair. The resistances (gears) can be graduated finely to make longer, effective active training possible.

During and before finishing the activity you can have your legs moved and relaxed by the motor again and again (alternating training).

**RECK MOTomed**<sup>®</sup>  
MovementTherapySystems

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## The MOTOmed Movement Supports Physical and Occupational Therapy.

The relaxation and warm-up phase with the MOTOmed is a useful preparation for the physiotherapist. Treatments become more efficient, easier and more pleasant for the patient, following the use of the MOTOmed.

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# Reply Card

I am interested in:



MOTOmed viva 1



MOTOmed viva 2



MOTOmed gracile 12 (pediatric unit)



Arm/upper body trainer



MOTOmed letto1/letto2 (bed unit)

- Please send me further information about the MOTomed MovementTherapySystem (Product overview, prices etc.).
- Please tell me more about the opportunity to **try out the MOTomed.**
- Please send me experience reports from users, physicians and physiotherapists.
- Please call me (date: ..... time: ..... )

Mr.    Mrs.    Ms.

Name: .....

First name: .....

Address: .....

Country: .....

Phone: .....

E-Mail: .....

Stamp

Reply

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## SymmetryTraining

When training actively, the SymmetryTraining analysis shows up automatically on the screen separately displaying the activity of the right and left side. This is particularly beneficial for patients with one-sided impairments, like stroke patients.

