

MOTomed®
move differently

Motomed® gracile 12

Movement Therapy: passive,
motor-assisted, active resistive

Movement Therapy for Children



RECK
Medizintechnik

	page
MOTomed® Movement Therapy	3
MOTomed® Movement Therapy Goals	4 – 5
MOTomed® gracile12 Models	6 – 7
MOTomed® Movement Therapy in Supine Position	8
MOTomed® Operating Panel	9
Special Features of the MOTomed® gracile12	10
Movement in Spite of Paralysis and Spasticity	11
MotivationPrograms – Fun and Games	12
TherapyPrograms	13
Basic Model	14
Accessories	15
MOTomed® Service	16 – 17
RECK Medizintechnik	18
MOTomed® Basic Models	19

MOTomed® kids
move differently



Movement is a basic precondition for regular body functions and development. Sometimes children may become deprived of their natural desire to move around due to a medical condition or an accident. This lack of movement can lead to secondary health complications. MOTOmed® Movement Therapy allows your child to move regardless of physical limitations.

- 1 passive** Smooth, regular movement of the legs or the arms can relax your muscles and regulate muscle tone.
- 2 motor-assisted** The »ServoCycling« function identifies weak muscle impulses. Even with minimal muscle strength, you can assist your child to engage in active training.
- 3 active resistive** Using their own muscle strength, children can move actively against finely adjusted resistance levels. This can help to significantly improve strength, endurance and coordination in order to achieve a better gait stability.

Arm training with the MOTOmed gracile12 leg and arm/upper body trainer



We give Movement, from the Heart

- + Reducing spasticity** Cramps (spasticity) can cause pain that blocks movement patterns. The MOTOMed® SpasmControl feature helps to gently reduce cramps and relax the muscles. The motorized, passive training counteracts general lack of movement. This relaxation of muscle tension can be a useful preparation to regular physical therapy. *MOTOMed® SpasmControl feature page 11.*
- + Discovering and promoting residual muscle strength** Even with unilateral paralysis, hidden and untrained residual muscle strength can be rediscovered and reactivated. *MOTOMed® ServoCycling page 3 and 11.*
- + Reducing the consequences of lack of movement** Daily movement training with the MOTOMed® gracile12 helps to reduce muscle shortening, joint stiffness, digestion problems and circulation disorders.



The MOTOMed® gracile12 provides a valuable addition to regular physical therapy. We are able to achieve better therapy results with little effort.

Regular MOTOMed® use helps children to become more flexible. They can achieve better muscle strength and endurance.

Most of the time, the patients attend the therapy session with greater motivation. They are able to finish their assignments more spontaneously.

Fields of application The MOTOMed® gracile12 Movement Therapy Device is used in the conditions of cerebral palsy, spina bifida, traumatic brain injury, quadriplegia, paraplegia, hemiplegia, partial paralysis, muscle diseases, muscular dystrophy and for early rehabilitation of children with multiple disabilities and heavy spasticity.

- + Improving and maintaining walking ability** Regular physical movement with the MOTomed® gracile12 can help to strengthen the leg muscles, improve coordination and body awareness.
- + Improving the overall well-being** It is widely recognized that physical activity produces feel-good hormones (e. g. endorphins, dopamine and serotonin). This has a positive impact on motivation, mobility and overall feeling of well-being.
- + No negative side effects** With the MOTomed® gracile12 and movement therapy properly adapted to the child, there have been no reports of negative side effects. Often time and medication dosage can be reduced.



Motomed® gracile 12

The MOTomed® gracile12 assists your child to engage in a healthy, natural movement pattern, most similar to riding a bicycle. This regular movement pattern has positive effects on the entire body.

Really
awesome!



MOTomed gracile12 –
child-friendly movement therapy for legs (item no. 594.003)

The MOTomed® gracile12 takes up as much room space as a regular chair and is also pleasantly quiet. To begin training, simply roll the MOTomed to the training area that your child prefers, e.g. your child's bedroom, the living room, or an outdoor area on a sunny day. Your child can begin his or her training with the MOTomed® gracile12 from a safe wheelchair or a chair.

Make two out of one The MOTomed® leg trainer can be upgraded and retrofited with an arm/upper body trainer. This addition will prove to be of benefit in targeting and strengthening your upper extremities, arm, shoulder muscles, and the spinal cord supporting muscles. A smooth and easy pivot system allows you to pivot the arm/upper body trainer 180 degrees toward your child for arm training. For leg training, simply pivot the arm trainer out of the training area. No tools are required.

Technical Specifications, standard model

Leg trainer

Measurements in cm/in.: 76 – 106 cm / 29.9 – 41.7 in. (h)
x 45 cm / 17.7 in. (w) x 68 – 85 cm / 26.8 – 33.5 in. (d),
weight: approx. 24.4 kg / 53.8 lbs

Leg trainer and arm/upper body trainer

Measurements in cm/in.: 95 – 114 cm / 37.4 – 44.9 in. (h)
x 45 cm / 17.7 in. (w) x 60 – 88 cm / 23.6 – 34.6 in. (d),
weight: approx. 32.4 kg / 71.4 lbs

Display size: 11.5 cm / 4.5 in. (w) x 8.5 cm / 3.4 in. (h),

Mains Voltage: according to country specification,

Construction: stable, all-metal design,

medical device class MPG IIa



MOTomed gracile12 leg and arm/upper body trainer –
child-friendly movement therapy for legs and arms (item no. 594.003 + 599.000)

Active in supine position



MOTOmed letto2 pediatric
leg training (item no. 279.024)



MOTOmed letto2 leg/arm pediatric
leg and arm/upper body training (item no. 279.016)

MOTOmed® letto2 pediatric version This special MOTOmed® naturally helps to retain important body functions in children who are confined to bed.

Fields of application: Intensive care units, rehabilitation centers, nursing homes and in home environment. *Application:* e.g. coma, apallic syndrome (coma vigil) and neurological/neuromuscular conditions.

Super easy



The original size of the display is
11.5 cm x 8.5 cm / 4.5 in. x 3.4 in.

Child-friendly operation The MOTomed® gracile12 is easily controlled from the operating panel with big, easy-feel buttons. Enjoy the simplicity of a two-button operation for training from start to finish. The MOTomed® gracile12 is operated very intuitively: For easy user guidance, the next user prompt is marked in green. You can activate a quick change directly by changing the settings or the TherapyProgram. All the operating prompts and the training feedback can be displayed in 27 different languages.

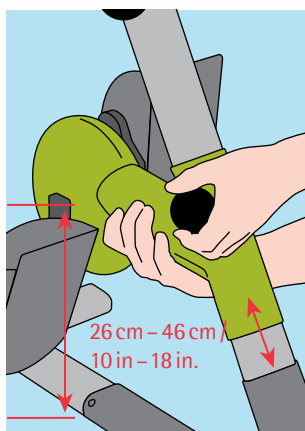
Simply safe

Child-friendly pedal distance The MOTomed® gracile12 is designed with a small pedal distance of 12 cm / 4.7 in. A »child-friendly« pedal distance helps to avoid unnatural strain and provides safe training.

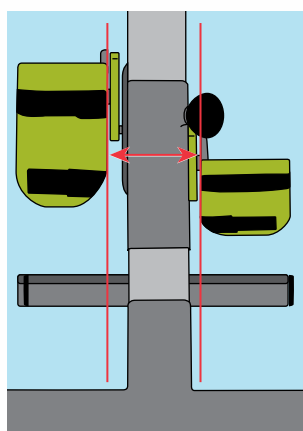
Variable height adjustment The MOTomed® gracile12 is the only movement therapy device for children which provides a continuous height adjustment of the pedal crank and foot shell from 26 cm to 46 cm / 10.2 in. to 18 in. Because of this the MOTomed® gracile12 can be adapted exactly to the individual length of the child's legs and the different wheelchair types and seat heights.

A child grows – the MOTomed® gracile12 grows along

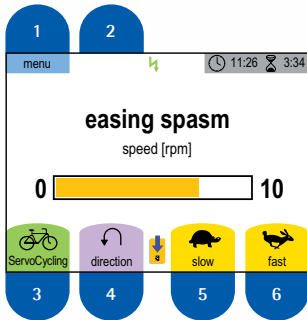
The MOTomed® gracile12 can be used by children with a minimum body height of 90 cm / 35 in. They can continue to use it as teenagers and adults.



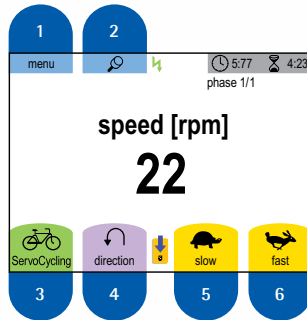
Height adjustment: MOTomed grows along with your child



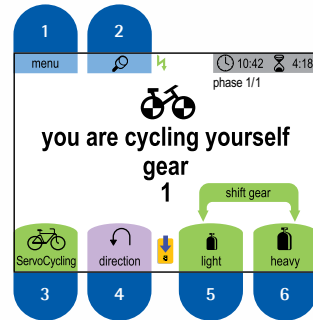
Child-friendly, narrow pedal distance of 12 cm / 4.7 in.



Display:
»relieving spasm« feature



Display:
»passive movement«



Display:
»active movement«

MOTomed® SpasmControl This particularly sensitive and gentle drive technology provides a training that protects the joints and muscles. The continuous, motor-assisted, movement pattern helps to slowly reduce lasting muscle tension (high muscle tone/spasticity). This feature can alleviate your child's muscle pain.

MOTomed® MovementProtector In the case of spasticity or muscle cramps, this safety feature stops the pedal movement gently. The benefit of this feature, the MOTomed® gracile12 optimally and continuously adapts to the muscle tone.

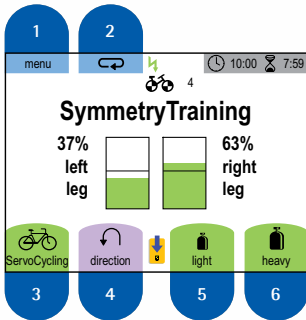
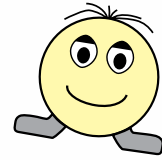
MOTomed® SpasmControl After the pedal movement is stopped by the MovementProtector feature, an automatic change of direction is activated. Legs and arms are relieved and the direction of rotation is switched following a brief resting period. This back and forth pattern is repeated until the cramping and spasticity are relieved. This process simulates the following therapeutic principle: A bending spasm is relieved by stretching, while a stretching spasm is eased by bending.

MOTomed® ServoCycling The MOTomed® can recognize the slightest muscle impulse and actively assists your child with completing a full cycle revolution. Therefore, your child is able to engage in active training, even with minimal strength. Goal-oriented MOTomed® gracile12 training can often help your child to regain residual muscle strength to the point where it becomes self-controlled.

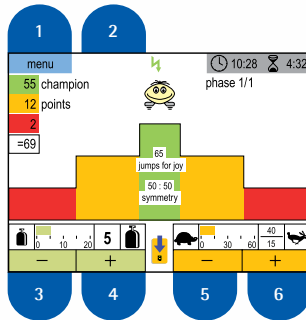


MOTomed gracile12 –
safe movement of the leg muscles

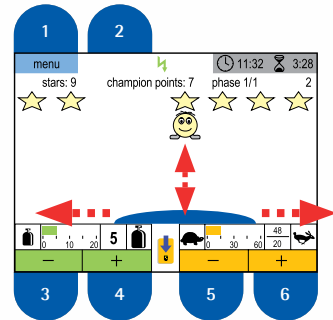
Movement, Fun and Games



Display: »SymmetryTraining«



Display: »MOTOmax MotivationProgram«



Display: »TRAMPOLINEmax MotivationProgram«

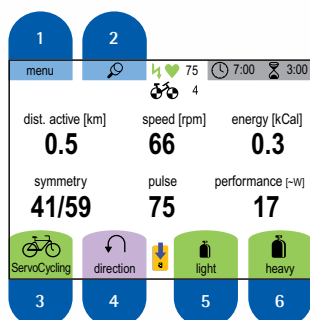
SymmetryTraining During the SymmetryTraining mode, a two-bar diagram (fig. above) shows how much strength your child applies with the left or the right side of the body. This helps to target and train the weaker side.

MotivationPrograms In a playful way, the child is motivated to engage in training that involves coordination, concentration, strength and endurance. The simultaneous physical and mental activity can have a positive effect on cognitive (psychological) performance.

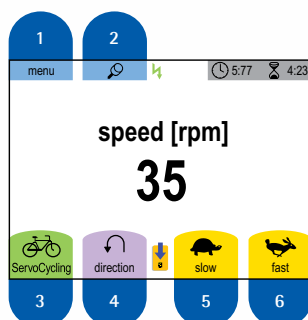
MOTOmax The goal is to equally engage your left and right side in order to keep MOTOmax on the middle green podium. By using own muscle strength your child can target and control the movement of the illustrated character Max by moving it to the right or to the left. MOTOmax rewards your success with a smile, jumps for joy and additional champion points.

TRAMPOLINEmax The goal of this training is to engage coordination and reaction span in a playful way. MOTOmax jumps into the sky to collect stars while jumping on a trampoline. The task of the child is to move the trampoline to the left or the right side by pushing on the pedals in order to help MOTOmax jump to collect stars. There are three levels of difficulty in this game. As the levels increase, MOTOmax moves faster and there are more stars to collect.

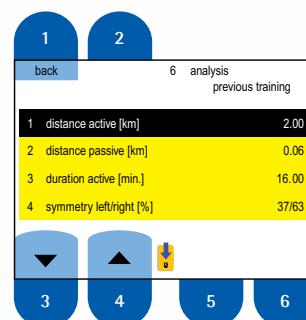




The »training overview screen« shows all essential training data at one glance



Display: Big individual view of one training value (here: »speed«)



Display: Post-training analysis - a comprehensive view of training values

Feedback during the training (biofeedback) Different biofeedback options provide real-time feedback for your child's accomplishments during training sessions. The targeted training helps to better control and improve your child's training pattern. It contributes to a better training success.

Post training analysis At the end of each training session, a detailed analysis can be retrieved of all relevant and important training data: e.g. muscle tone, distance active/passive, duration active/passive, average/maximum activity, symmetry, total calories, tone, jumps for joy, stars and champion points.

Individualized and targeted training Select a medical condition or therapy goal from the list of special TherapyPrograms that best suits your child. These programs were created by our sport scientists in accordance to therapeutic aspects. Goal-oriented movement therapy increases the success for a very beneficial therapy session.

Expert mode Take advantage of all the possibilities to adapt and individualize TherapyPrograms for the needs of your child, directly from the MOTomed® operating panel.

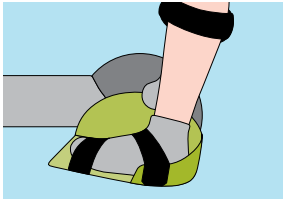


MOTomed gracile12 leg and arm/upper body trainer - Rewards and fun with the alternating muscle movement of the legs and arm/upper body trainer

Basic Model

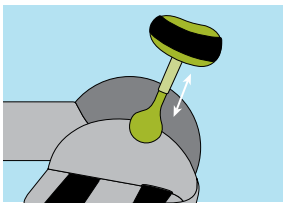
For the most **ideal therapy success** your child needs the **best MOTomed® accessories**. The MOTomed® gracile12 is equipped with high comfort accessories. The wide assortment of standard accessories provides the most specialized customization to fit the individual needs of your child.

Included in the standard equipment are the following accessories: Pediatric safety foot shells, pediatric leg guides with calf shells, Velcro straps for fastening of the feet and legs, stable handlebar, 2-stage pedal radius adjustment, longer front stand with big transport castors, and the features presented in this brochure and TherapyPrograms.



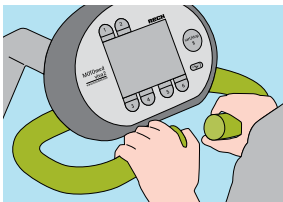
Pediatric safety foot shells

- safely holds the feet
- fixation with elastic Velcro straps
- high inside panel protect the ankles



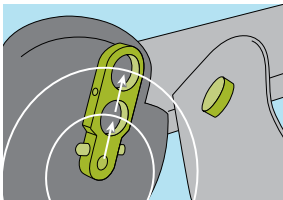
Pediatric leg guides with calf shells

- firm hold for all kinds of paralysis
- fixation with elastic Velcro straps
- height-adjustable calf shells



Handlebar adjustable in inclination, stable handlebar

- for a better hold and grip during the leg training
- integrated, easy reach, accessible operating panel
- height-adjustable from 65 cm to 94 cm / 25.6 in. to 37 in.
- distance to the child adjustable 6 cm / 2.4 in.



2-stage pedal radius adjustment

- switch out the pedal radius within a few seconds from 3.5 cm to 7 cm / 1.4 in. to 2.8 in. by using an Allen key

Available in your favorite color

These colors area available upon request.



Flipper - clear blue
standard



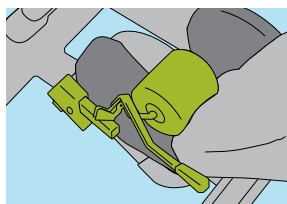
Speedy - sporty red
additional cost



Skippy - warm yellow
additional cost

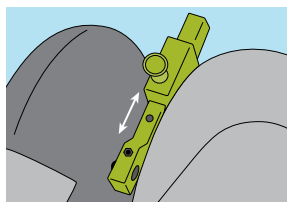


Jungle - vibrant green
additional cost



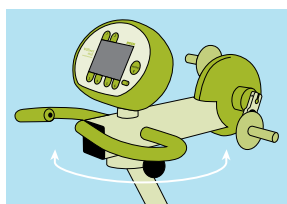
Self-operating foot holders (pair; item no. 598.000)

- soft foam rolls help to gently fasten the feet into position
- firm hold despite of strong spasticity due to the integrated safety lock
- for a quick positioning aid with no assistance required



Pedal radius quick adjustment (pair; item no. 588.000)

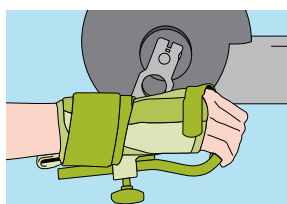
- for an exact adjustment of the radius on both sides
- stageless or 3-stage (5.5/8/10.5 cm - 2.2/3.1/4.1 in.)
- recommended for joint stiffness (contractures) and partially in case of spasticity



Arm/upper body trainer passive and active (item no. 599.000)

Retrofit (item no. 599.100)

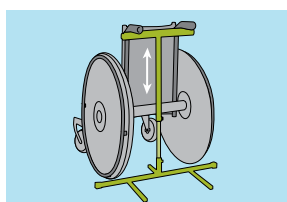
- incl. pivoted handlebar for leg training
- can be pivoted into the training area for an absolute leg room for leg or arm/upper body training
- incl. SymmetryTraining and MotivationPrograms
- pedal radius 2-stage (3.5 cm and 7 cm / 1.4 in. and 2.8 in.)



Pediatric forearm shells with arm mitts (pair; item no. 556.024)

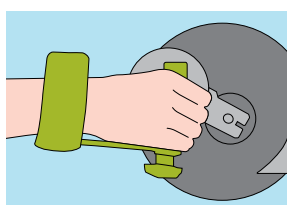
- guidance of arms incl. padded arm mitts for strong paralysis
- horizontal movement of the forearm is also possible
- ergonomically shaped (22 cm / 8.7 in.) / mitts available in different sizes – standard size: s-small

Additional arm/hand fixation options are available. Ask us about it!



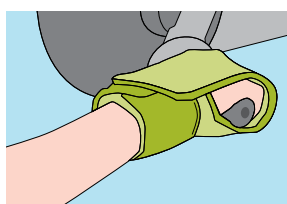
Wheelchair stabilizer (item no. 100.020)

- recommended for high spasticity
- provides wheelchair support: The wheelchair cannot tilt or slide backwards
- for all common wheelchair types
- with a padded support bar for the wheelchair handles



Tetra handles for children (pair; item no. 555.020)

- for a simple and independent insertion of the arms
- with an easily adjustable forearm support
- particularly suitable for quadriplegic persons (similar hand grip as seen in a hand bike)
- for a guided training in physiological zero position



Pediatric hand mitts for hand fixation (piece; item no. 562.020)

- simple and quick fixation of weak or paralyzed hands to the arm trainer, the handlebar, and different types of handles
- recommended for users with limited grip possibilities
- also available for teenagers: item no. 562.030 and adults: item no. 562.000

Request additional information about the configuration or accessories with your MOTOmed® consultant or review it in the current product overview. Call the RECK Company in Germany: phone +49 7374 18-85.

Become active!



Competent consultation

The MOTOMed® team of professionals includes 10 highly experienced and accredited sports scientists, physical therapists, and occupational therapists. You will receive a competent consultation on the selection and configuration of your MOTOMed® gracile12 and the most suitable TherapyProgram for your child.



Free product demonstration!

You and your child are provided the option to try the MOTOMed® within the comforts of your home.



Demonstration

We will be happy to set up a demonstration with your local MOTOMed® representative. The trial is non-binding and free of charge.

Renting options

Ask your local representative about the possibility to rent the MOTOMed® gracile12.

Financing options

To accommodate your child with this easy, uncomplicated MOTOMed® Movement Therapy ask your **local representative** which financing options are available.



My son was unable to move without pain due to the cerebral palsy. The MOTomed® gracile12 has allowed him to engage in regular, pain free movement despite of spasticity.

MOTomed® is just great

The muscle tone is regulated and the muscles are relaxed and strengthened. And most important for me: My son loves to do this training. He particularly enjoys it when he can make the game character Max jump up.

Get informed!

Ask us about *special brochures, prices or MOTomed® videos (DVD)*.
Request more information on: www.motomed.com or
send us an email at info@motomed.com.

We will be happy to provide your physician or therapist with testimonials from other users.

Your MOTomed® consultant will process your request promptly.
Call us: phone +49 7374 18-85



14.000 m² of production and office space provide us enough room to live out the principles of a family business: Special values, durability and a flat hierarchical structure.



Experience and Competence

Since 1971 the **RECK** Company has contributed to innovation in the field of movement therapy, with world wide distribution, and a close and confirming collaboration with physicians, therapists, universities and MOTomed® patients. The motorized, software-controlled MOTomed® is successfully used internationally in over 70 countries since 1981. What started as a family business over 50 years ago, is now a company with over 250 employees, developing groundbreaking passive, motor-assisted and active resistive movement therapy. Innovation, high quality, reliability, and safety – is what characterizes MOTomed® and »made in Germany«.

10 MOTOMed® Basic Models* with a wide accessory selection.

Ask us about it!



MOTOMed viva2 leg trainer
professional movement trainer for high expectations



Arm/upper body trainer in combination with leg trainer
for viva2, viva2 light, viva2 Parkinson, gracile12



MOTOMed viva2 light
pleasant movement with simple operation



MOTOMed viva2 Parkinson
up to 90 r.p.m. for a fast passive movement (Forced Exercise)



MOTOMed viva2 with FES
(functional electrical stimulation)
for an effective cardiovascular training, e.g. spinal cord injury



MOTOMed muvi
simultaneous arm and leg training



MOTOMed viva2 stativ
only for arm/upper body training



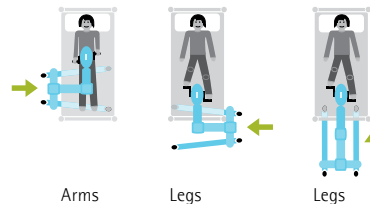
MOTOMed gracile12
the »growth-adaptable« movement trainer for children and small adults



MOTOMed letto2
movement therapy for bedridden patients



MOTOMed letto2 leg/arm
leg and arm/upper body trainer, attachable from three bed sides



*NOT ALL MODELS ARE AVAILABLE IN ALL COUNTRIES.

Quality and Variety

In order to provide the most individualized movement training experience, a total of 10 **RECK** MOTOMed® models are available to choose from. The MOTOMed® viva models are intended for movement from a chair or wheelchair. The different MOTOMed® letto models are applied for training in bed and the MOTOMed® gracile12 is used by children. Over 90 accessories and different software applications contribute to improved adaptations to individual needs.

There are several brochures, studies and product information available.
phone: +49 7374 18-85 or email: info@motomed.com.

MOTMed®
move differently

Motomed® gracile 12

**This MOTMed®
training is really neat!**

I like to review the results with my friends. It amazes me what information is retrievable with the MOTMed®. The good thing about it is that you can watch your training progress.



"Made in Germany"



Your MOTMed partner:

RECK

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

phone +49 7374 18-85, fax +49 7374 18-480,
info@motomed.com, www.motomed.com

GB 713.6/W1b (dt. Version "T") 11.14 ebnS. All rights reserved for technical changes and innovations. **RECK**. The use of reprints and excerpts is only allowed with written permission of the RECK Company. **RECK**.