

THERAPY CONCEPTS

2013
2014

Professional Therapy concepts for neurological
rehabilitation and rehabilitation of the elderly



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»LIVING IS MOVEMENT,
IT STARTS WITH MOVEMENT,
AND WITHOUT MOVEMENT,
THERE IS NO LIFE.
MOVEMENT IS AS IMPORTANT
AS OUR DAILY BREAD.«



Peter Kopf, owner and managing director

THERA
TRAINER

FOR A LIFE IN MOTION

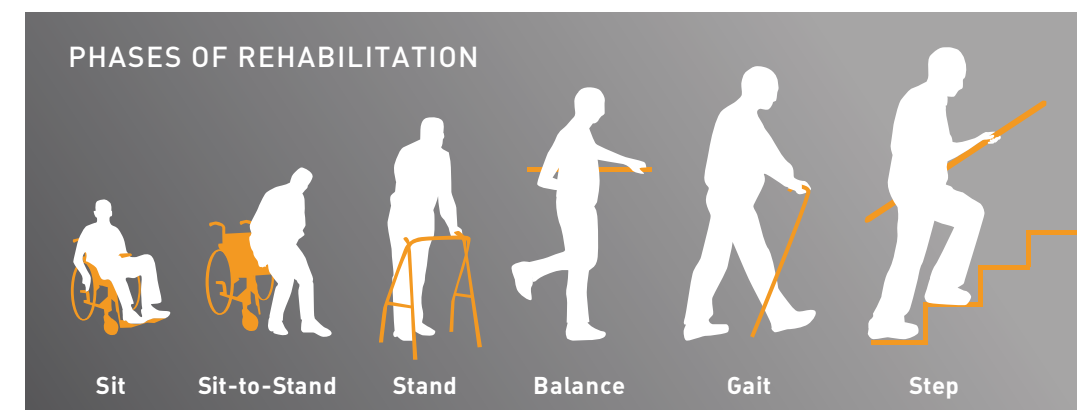
Dear Readers,

»For a life in motion« is our philosophy clear and brief. We move heaven and earth so you can provide your neurological and elderly patients with the best exercise therapy equipment every day.

We, medica Medizintechnik GmbH, offer not only the equipment, but also equipment-assisted concepts with a comprehensive therapy and training concept and practical exercise suggestions. Our vision: To provide therapy concepts for every phase of rehab – all from one hand.

Beside their application in individual, self- and group therapy, THERA-Trainers are an important element of the clinical therapy concept. They are to complement, facilitate and assist in the work of the therapists. Also, THERA-Trainers often allow entirely new therapy approaches. Wait and see what new possibilities our THERA-Trainers offer.

Peter Kopf and the whole THERA-Trainer team





ALL-ROUND
SERVICE

COUN-
SELLING

TEST
SERVICE

DELIVERY
AND IN-
STALLATION
SERVICE

IN-
STRUCTION

EXERCISE

TECHNICAL
SERVICE

A RELIABLE PARTNER

System provider

For us, reliability is more than just making reliable products. Reliability as we understand it includes feasible value propositions you can rely on.

- Your therapy equipment for the most important rehab phases comes from one high-performance manufacturer, that is, you just have **one contact person** to deal with
- The **consistent design language** all units have in common will give your facility a professional appearance
- All THERA-Trainers use the same **consistent control concept** with a consistent control logic, colour concept

and symbol language. This allows quick and easy briefing of new employees and patients

- Employee **training and qualification** always cover the entire product series, which will significantly reduce the time, effort and expenses for training courses
- The **technical service** will be covered by a supplier. Our full-service package includes therapy equipment, training and maintenance

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EASY TO USE

Intuitive handling

»Easy to use« is easier said than done. Mostly, the simplest of solutions prove to be the most challenging ones.

The interface between people and technology is the **control unit with a screen**. Technology must serve people. Therefore our goal was to make **menu navigation as intuitive as possible**, that is to create a self-explanatory user interface you can easily use without help or instructions, or after a short briefing. This was achieved by means of clear screen masks, plain symbols, high-contrast fonts and illustrations, a simple

control logic and large keys.

A milestone in the development of the perfect user interface is the **START/STOP traffic light control** introduced in THERA-Trainers in 1997. Especially persons with perception disorders need such simple solutions. Therefore, »easy to use« just means simple, quick and safe handling in everyday life.



SAFE EXERCISE

Quality & safety

»Made in Germany« is a synonym for highest quality, reliability and safety.

Even when developing, we focus on internal **quality checks**. In our own test labs **we conduct high-stress performance tests and safety checks**. 95 % of our carefully selected suppliers have their headquarters in Germany, so »Made in Germany« applies here as well. To keep up with all your requirements, we thoroughly test the THERA-Trainers' suitability for daily use in medical facilities.

Additionally, our engineers and every single one of our employees work according to a **certified quality management system** that has been accompanying the entire development and production process since 1999. Because we know how important quality and safety are for you and your patients. Therefore, every THERA-Trainer complies with the applicable standards and laws, and it goes without saying that we set great store by complete and consistent documentation.

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E-GO

2012



2010



2004



2003



2001



MILE-
STONES

INVENTED BY ENGINEERS

Leader in innovation

Innovation doesn't happen by chance. What drives us is the will to set people in motion and help patients with movement restrictions regain their mobility. Success-oriented physical exercise therapy starts with **high-class equipment**.

New developments that »move« you and your patients are the goal of our engineers. For more than 20 years, medica has been the originator of **many ground-breaking innovations**. Some examples:

- 2012** Launch of the THERA-Trainer e-go. The **innovation in gait training**
- 2010** An important step towards the independent use of THERA-Trainers – **the patented foot fixing**
- 2004** The **first colour screen** for active-passive exercisers
- 2003** A world innovation »**Dynamic standing**« with the BALANCE-Trainer series
- 2001** The birth of »**symmetry training**« – another medica invention

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BERND RALL
– THERAPIST –



»The medica
engineers keep
surprising me
with their interest
in therapeutic
requirements and
their ability
to come up with
fantastic solutions
for us therapists.«

THERAPY
RANGE



Strength



Fitness



Performance



Mobility



Coordination



Balance

DEVELOPED WITH THERAPISTS

The work with THERA-Trainers assists the therapists and boosts the therapeutic effect. They complement manual therapies in an effective and success-oriented way. **The goal: improving your patients' mobility.** Even in the product development stage, our engineers bring in therapists and doctors. These **experts** give important impulses for new products and improvements. One of medica's pioneer therapists is **Bernd Rall**, therapy manager at the Ichenhausen specialist hospital. He has been working with our team of developers for more than ten years.

Proven therapy concepts

The result is the perfect exercise equipment for strength, cardio, balance, mobility, coordination etc., and even entire concepts for you and your patients. **Science and practice complement one another perfectly.** You benefit from this combination, since the exercise with THERA-Trainers is supremely patient-friendly, and the ability of the recommended exercises to **»improve the patients' mobility«** has been tested at medical facilities.

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DEVICE-BASED THERAPY

EXERCISING WITH THERA-TRAINERS – AN IMPORTANT ELEMENT OF YOUR THERAPY CONCEPT

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Device-based therapy provides valuable support in every phase of motor rehab. Scientific findings in the field of neuro-rehabilitation are applied in device-based therapy. Examples are repetitive exercises **(01)**, task-oriented exercise **(02)** and shaping **(03)**.

BENEFITS FOR THE PATIENTS: MOTIVATION AND SUCCESS

Patients usually have very positive experiences with device-based therapy using THERA-Trainers and integrated biofeedback illustrations. The exercise is task- and goal-oriented. Frequent repetition of certain exercises increases the exercise intensity. The social element of exercising in groups and the result checks afterwards will appeal to your patients' ambitions and motivate them for the next exercise session.

BENEFITS FOR THE THERAPIST: EASIER WORK AND BETTER TIME MANAGEMENT

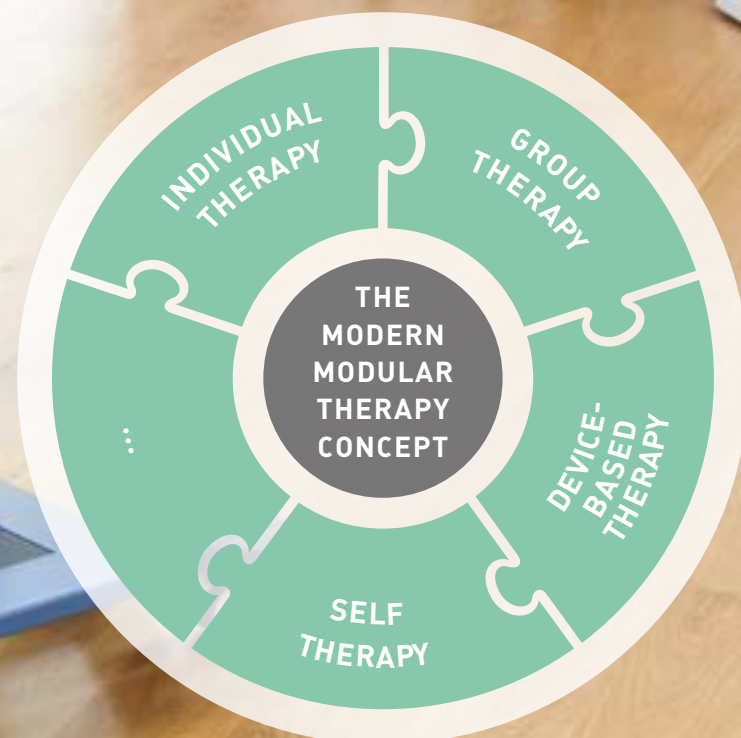
Device-based exercise is a safe form of exercise which reduces the physical exertion required from the therapist by having the patient safely secured and protected against falling **(04)**. Exercising with a THERA-Trainer also simplifies the therapists' time management. While one patient is doing repetitive exercises on an exerciser, the therapist can attend to someone else who requires a more demanding and time-consuming individual therapy. The exercise documentation option can be used for systematic exercise control and as proof for doctors and health insurance providers. THERA-Trainers also offer new therapy options.

BENEFITS FOR THE FACILITY: COST MINIMISATION AND ATTRACTIVENESS

Device-based therapy allows for a much higher »therapy density« with the same number of staff. THERA-Trainers permit group therapy, »free« self-exercise and supervised »independent« exercise. Thanks to the short »set-up time«, the effective exercise time is very long. THERA-Trainers can increase your therapy range and thus your facility's attractiveness.

- (01)** Frequent repetition of a certain type of movement
- (02)** Task-oriented exercise
- (03)** Exercising on the patient's individual limit

- (04)** THERA-exercisers from the Standing & Balancing series are equipped with knee and pelvic supports



CYCLING

Patients especially like cycling exercises for their natural and rhythmic movements. Nearly everyone, from wheelchair users to patients able to walk independently, can use cycling exercise to actively help along their rehab. That has the most positive effect on their **quality of life and their self-esteem.**

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...APPRECIATED BY
BOTH PATIENTS
AND THERAPISTS



CYCLING THERAPY GOALS

THERA-Trainers allow working toward lots of therapy goals effectively in a short time.

ACTIVATING THE CARDIOVASCULAR SYSTEM

Regular exercise activates the entire cardiovascular system. This will stabilise the blood pressure to improve the blood supply of »cold legs« and reduce oedemas. An active cardiovascular system improves fat burning, blood sugar and cholesterol regulation.

FITNESS

75% of all stroke patients suffer from an additional cardiac disease. Endurance training will reduce the risk of high blood pressure and cardiac diseases and thus the risk of further strokes.

ACTIVATING THE METABOLISM

Regular exercise activates all metabolic processes of the body. This will have a positive effect on digestion and urination.

MAINTAINING/IMPROVING MUSCULAR STRENGTH

Systematic and regular concentric and excentric exercises can maintain and restore even very low muscular strength. Different biofeedback illustrations permit systematic strength training.

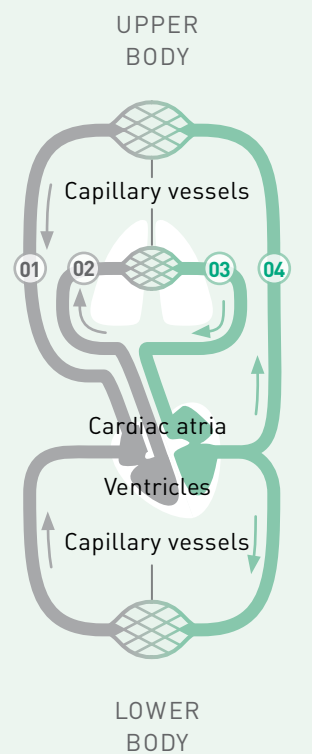
MOBILITY/MUSCLE TONE REGULATION

Especially patients lacking exercise can use THERA-Trainers to regulate their muscle tone with rhythmic and reciprocal movement and thus effectively prevent contractions.

MENTAL STABILITY

Regular endurance training demonstrably increases the release of the »happy hormone« dopamine. Together with the feeling of success after exercising, this will cause a positive mood and effectively prevent depressions.

CARDIOVASCULAR SYSTEM



01 Systemic circulation
02 Pulmonary circulation
Blood with less
oxygen in veins

03 Pulmonary circulation
04 Systemic circulation
Blood with more
oxygen in arteries

MORE THAN AN ERGOMETER

THERA-Trainers from the Cycling series serve the same purpose for the elderly and for people with disabilities as bicycle ergometers do for young and healthy people. There are differences that are of crucial importance for the exercise:

Control and display unit

fulfils the requirements of the elderly and of people with disability with regards to biofeedback and ease of use

Leg support and foot fixing

support weak legs and guarantee safe support

Motor drive

permits passive, assistive or active exercise – with smooth transitions and harmonic rotation

Tip-up protection

prevents the chair/wheelchair from tipping over and ensures an optimal distance between THERA-Trainer and user

Chair or wheelchair

so that even persons suffering from muscle weakness can exercise safely



THERA-TRAINER TIGO

...THE BEST AMONG ACTIVE-PASSIVE EXERCISERS

Formerly, there was THERA-live with the small colour screen, and THERA-vital with the large one. Two exercisers became one – the new THERA-Trainer tigo. You can pick one of three different-sized colour screens. You will be thrilled.



01

SAFE, EASY AND COMFORTABLE – THE PATENTED THERA-TRAINER FOOT FIXING

You can secure your patient's feet in the foot rests quickly and safely without causing pressure marks. Naturally, there mustn't be anything in



02



03



04



05

the way when putting the feet into the foot rests. They should be easily adaptable to different leg and foot sizes. Another aspect not to be neglected is that the foot fixing must be easy to open. We have developed the perfect solution for you and tested it in the hardest of conditions – see for yourself!

THERA-TRAINER TIGO – AN ERGONOMIC ALL-ROUNDER

With the THERA-Trainer tigo, all everyday adjustments are done in no time at all. Height and distance of the safety handle and the upper body exerciser can be individually adjusted to one's size. Various hand and arm rests can be attached to the upper body exerciser – no tools required. The inclination of the control and display units is adjustable as well for the patient to keep everything in view. Stepless crank radius adjustment between 65 and 115 mm makes allowances for different stages of leg mobility. Even the device base and thus the base area can be adjusted to meet individual requirements. VARIABILITY is our top priority.



06



07



08



09

(01) THERA-Trainer tigo 506
Picture includes accessories

Foot fixing

(02) Putting the foot into the foot rest

(03) Closing the foot fixing

(04) Applying the leg support

(05) Opening the foot fixing

Flexibility

(06) Safety handle with adjustable height and inclination

(07) Control and display unit with adjustable inclination

(08) Upper body exerciser with adjustable distances

(09) Pull-out device base with transport castors

CONTROL- AND DISPLAY UNIT – INTELLIGENCE MAKES THE DIFFERENCE

The screen is the interface between people and technology. Our developers attach great importance not only to the **latest screen technology**, but also to easy handling and clear screen displays.

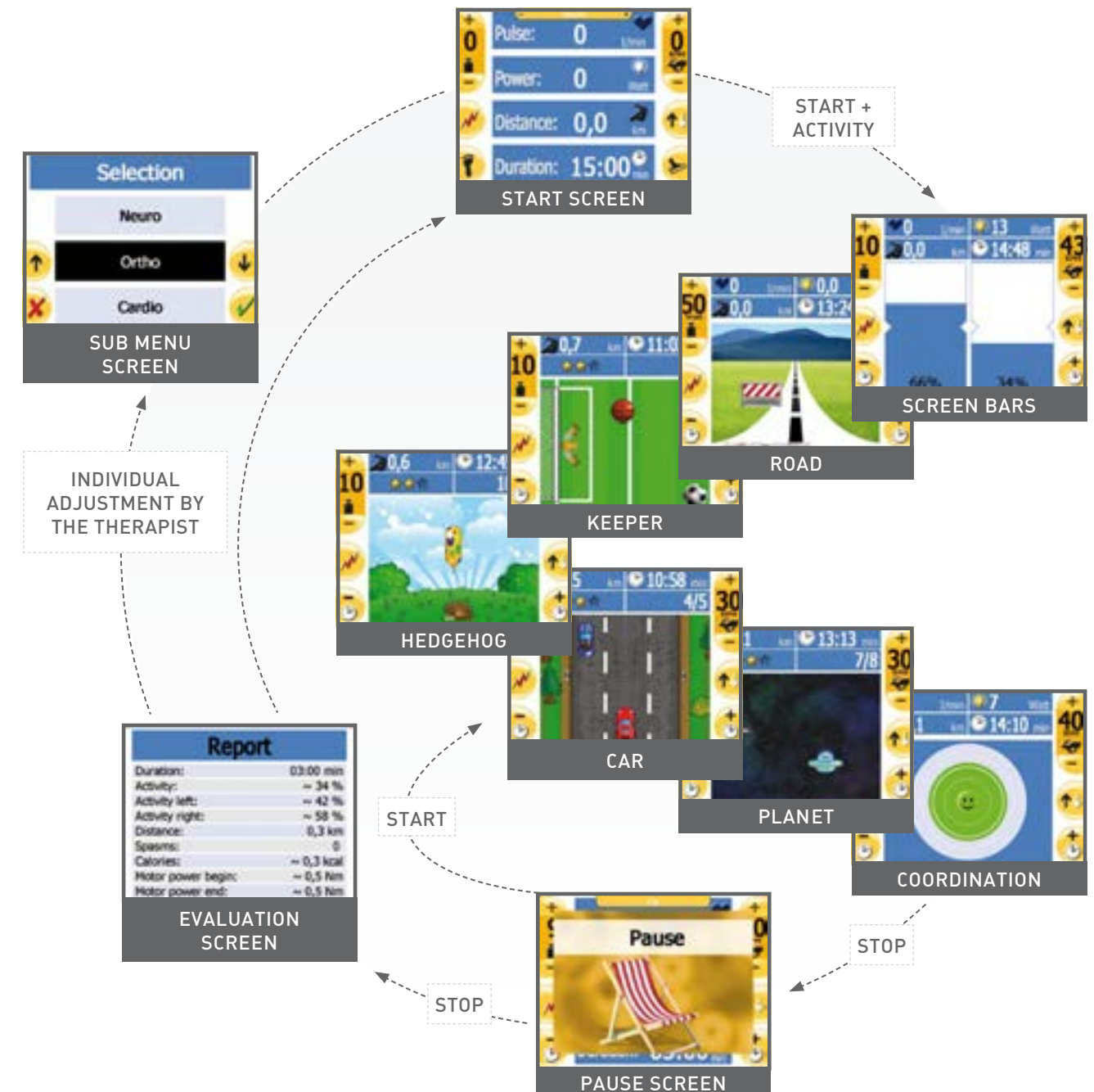
True to the motto »Never change a running system«, the **START/STOP traffic light control** of the previous model remained unchanged. It doesn't get any easier. You operate the system with large membrane keys or touch soft keys. You can adjust important exercise parameters such as number of rotations, braking resistance, direction of rotation, exercise time etc. anytime without changing screens.

All important instructions and exercise data are displayed on different-sized screens (2.7" – 10.4") with **excellent TFT screen quality**. With the 5.7" screen or larger, the therapist can preset a number of exercise parameters in a special sub menu. The larger the screen, the more powerful is the processor. So larger screens offer more setting options, and also more motivating biofeedback illustrations.

- (01) Control and display unit 10.4"
- (02) Control and display unit 5.7"
- (03) Control and display unit 2.7"

BIOFEEDBACK – FUN AND SUCCESS GUARANTEED

The trick is to package effective therapeutic exercise as »fun and games« to encourage goal-oriented exercise and keep the patients highly motivated. This will make them focus on their exercise and keep exercising until their goal is reached. After the exercising session, the patient gets a clear performance evaluation – the best motivation for the next session.



BIOFEEDBACK FOR GROUP THERAPY

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Group therapy is an important and necessary element of the rehabilitation process. The new group biofeedback option for THERA-Trainers combines the advantages of group therapy with important approaches of learning theory.

- High-intensity repetitive exercise offers a more successful exercise
- Task-oriented exercise increases motivation
- Biofeedback serves as systematic feedback of the exercise success for both patient and therapist
- Group therapy both promotes and requires interaction between patients and thus social interaction

And don't forget: Group therapy is fun!

TOGETHER WE ARE STRONG

The majority of patients, when asked, will say they prefer group exercise to individual exercise - doing your exercises in a group motivates and is simply more fun. The group biofeedback option allows for up to four patients to exercise in front of a large screen - as a team or as competitors. The patients can decide whether they want to exercise alone or in a group. If they opt for the group, the therapist will confirm the participation and specify the exercise level. In the end everyone will see their overall score, and surely the winner will get a round of applause from his teammates.

PERFECT MOTIVATION

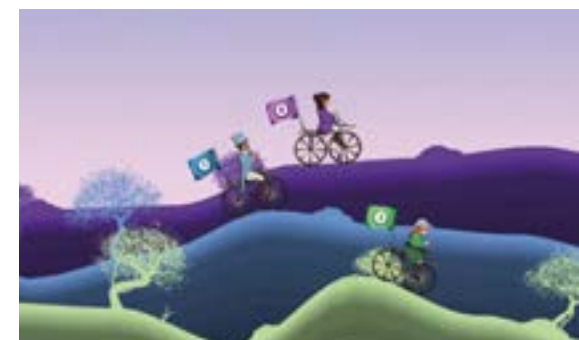
(01) Let your patients fly their own helicopters.

The task is to move the helicopter up or down by changing the number of rotations and bounce away the balloon. You'll be surprised how much fun your patients will have exercising with this biofeedback - they will hardly notice that it is the perfect fitness training.

(02) Who doesn't like bike tours through the hills? The biofeedback option »Hill Race« is a therapy exercise where several patients move through a landscape by pedalling as quickly or slowly as required. Too quick or uncoordinated pedalling will cause the bike to lurch. Patients who are stronger and have more stamina will get a landscape with more and higher mountains so that everyone can arrive at the same time.



(01) Biofeedback »Helicopter«



(02) Biofeedback »Hill Race«



Biofeedback »Bike tour«

MODELS CYCLING

THERA-TRAINER TIGO

502

The model 502 is the perfect **basic unit for your patients' leg exercises**. This comfortably priced exerciser provides all basic functions for effective cycling exercise.



THERA-TRAINER TIGO

506

The model tigo 506 is a **top-quality leg exerciser**. Equipped with a 10.4" colour screen, it provides all adjustment and biofeedback options you can possibly wish for – and need for different patients with different requirements.



On this page you can find different models for different target groups and requirements – proven in the everyday routine of medical facilities.

THERA-TRAINER TIGO

510

The professional **multi-purpose exerciser for legs and upper body**. The tigo 510 model is the perfect leg and upper body exerciser for small rooms and/or low patient frequency.



THERA-TRAINER VEHO

512

The model veho 512 is a specialist for **separate exercises of arms, back and shoulder girdle**. In medical facilities it makes sense to have not only leg exercisers, but also special exercisers for the upper body.



STANDARD EQUIPMENT
CYCLING

Basic equipment ●

Product description	tigo 502	tigo 506	tigo 510	veho 512
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BASE UNIT



THERA-Trainer tigo/veho

The base units consist of a robust and long-lasting blue metal frame with an environmentally friendly powder coating. The base unit THERA-Trainer tigo is additionally equipped with a 240 watt electric motor that provides sufficient power reserves and harmonic rotation. The base unit veho doesn't have an electric motor.

●	●	●	●
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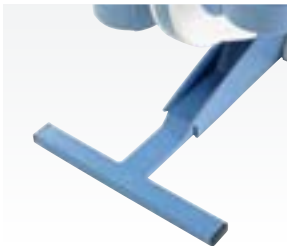
DEVICE BASE UNIT



Device base with transport castors

The pull-out device base with transport castors increases the stability of THERA-Trainers tigo and veho. The extended base is especially helpful when using the upper body exerciser. The 74 mm transport castors allow moving the exerciser smoothly and without difficulties.

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Device base flat

We recommend the flat device base for sports/active wheelchairs with fixed footrests. This device base is NOT equipped with transport castors.

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Device base with height adjustment and wheel set

The device base with height adjustment and wheel set is necessary for persons with short legs and for children and adolescents with high wheelchair seats. The height is adjustable in steps between 50 – 150 mm without tools. The combination with the wheel set allows moving the exerciser smoothly and without difficulties.

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Self-operable tip-up protection

Most patients can use the self-operable tip-up protection without help. The plastic-coated hooks are simply attached to the chair or wheelchair. The tip-up protection protects the chair/wheelchair from tipping over, e.g. in case of sudden stretch spasm. The distance between chair/wheelchair and exerciser is secured.

●	●		
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Product description

FOOT FIXING / LEG SUPPORT



Foot rest with 2-stepped radius adjustment

The foot rests are made of wear- and shock-resistant plastic. They are easy to clean and sanitize. A safety edge and grip surface offer safe support in the foot rests. The crank radius can be adapted to the individual mobility of the legs with a tool.

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Foot rest with stepless radius adjustment incl. tools

The foot rests are made of wear- and shock-resistant plastic. They are easy to clean and sanitize. A safety edge and grip surface offer safe support in the foot rests. The stepless radius adjustment with tools allows adjusting the crank radius and thus the range of motion to individual requirements. The crank radius is adjustable between 65 – 115 mm without steps.

	●	●	
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Leg support

The leg support supports weak or paralysed legs. Its height can be adjusted to different leg lengths. The cushion prevents pressure marks and is washable and sanitizable. Thanks to its articulated support, the leg movement mimics the natural motion of the ankle joint.

●	●	●	
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Foot fixing






For quick fixation of the feet without help, the foot fixings are equipped with positionable cushions. Gentle pressure is sufficient for opening or closing the fixings. The cushion prevents pressure marks and is washable and sanitizable.





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STANDARD EQUIPMENT

CYCLING

Basic equipment ●

Product description	tigo 502	tigo 506	tigo 510	veho 512
SAFETY HANDLE/UPPER BODY EXERCISER				
<div></div> <div>Safety handle The safety handle provides safe support during exercising – especially for active exercises or lack of upper body stability. Height and inclination of the safety handle are adjustable. A non-skid grip cover prevents losing one’s grip during exercising.</div>	●	●		
<div></div> <div>Upper body exerciser The upper body exerciser permits passive and active exercise of the entire upper body and is equipped with a 100 watt electric motor. Height and inclination of the upper body exerciser are adjustable. The soft-glide adjustment also permits adjusting the distance of the upper body exerciser to the user (horizontal). The upper body exerciser is equipped with plug-in therapy grips.</div>			●	●
<div></div> <div>Grip adapter Thanks to the grip adapters, it’s no trouble at all to turn the upper body exerciser into a safety handle. That way, safety is guaranteed when doing leg exercises.</div>			●	
<div></div> <div>Wristbands for therapy grips/safety handle These wristbands are designed for securing weak or paralysed hands on the safety handle or therapy grips of the upper body exerciser.</div>			●	●
<div></div> <div>Arm rests for therapy grips The arm rests for therapy grips secure the entire forearm in an ergonomically shaped armrest with velcros. The arm rests can be plugged to the therapy grips.</div>			●	●

Product description	tigo 502	tigo 506	tigo 510	veho 512
<div></div> <div>Arm rests with bar-shaped grips The arm rests with bar-shaped grips allow lateral movement of the secured forearms. The grips can be attached horizontally or vertically as required.</div>				
CONTROL AND DISPLAY UNITS				
<div></div> <div>Control and display unit with 10.4"-colour screen incl. touch function The control and display unit with 10.4"-colour screen incl. touch function features the latest technologies. It sets benchmarks regarding size (211×158 mm), handling, readability and biofeedback illustrations and allows setting all kinds of exercise parameters and provides biofeedback in complex high-quality TFT illustrations.</div>		●	●	●
<div></div> <div>Control and display unit with 5.7"-colour screen This high-resolution 115×86 mm colour screen can be used as an alternative to the 10.4" colour screen with touch function. In the sub menu, you can preset exercise parameters and select easily biofeedback illustrations.</div>				
<div></div> <div>Control and display unit with 2.7"-colour screen This control and display unit has a 2.7" colour screen (51×40 mm) that shows clearly readable exercise data. Beside the START/STOP traffic light control, the ergonomic remote control offers all necessary settings. Speed, resistance and direction of rotation.</div>	●			

STANDING & BALANCING

Standing and walking has top priority for everyone, especially for wheelchair users – and there's a reason for that. From a therapeutic point of view, standing can't be overrated. Safe standing and good balance are basic requirements for walking. On the following pages, you can find standing and balancing exercisers that are suitable for patients with risk of falling as well as for wheelchair users and patients in vegetative state. Dynamic vertical exercise is the »champions league« for every patient.

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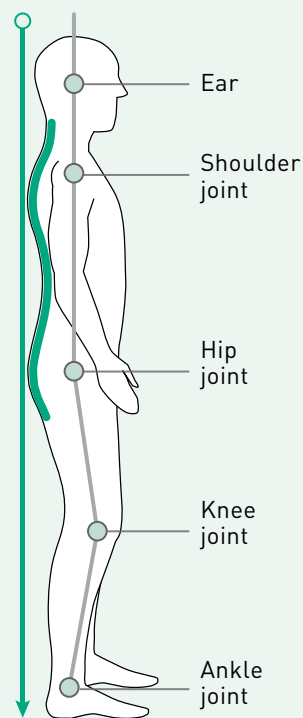
...EXERCISE
EYE TO EYE



STANDING & BALANCING THERAPY GOALS

There are plenty of good reasons for standing and balancing being so highly appreciated by therapists. Here are some of the most important ones:

HOW TO STAND CORRECTLY



PELVIS AND UPPER BODY STABILITY

Sufficient pelvis and upper body stability are basic requirements for being able to move around and cope with gravity – without it, unaided standing and walking is impossible. So, an important therapy goal is to exercise the upper body and pelvis muscles at the patient's individual limit with repetitive exercises in an environment that protects the patient from falling.

BALANCE

Walking is not just about quantity, but above all about quality and safety. Many users of wheelchairs, walkers or crutches are able to walk short distances, but the risk of falling is very high. This often leads to long and expensive hospital stays and subsequently to limited or total lack of independence. With this in mind, balance exercising seems even more important.

MOBILITY/MUSCLE TONE REGULATION

Long periods of static sitting or lying will increase the flexion tone of the muscular system and subsequently lead to muscular and tendon shortening. Without sufficient mobility of the ankle, hip and knee joints, neither safe standing nor normal walking are possible. Regular upright and dynamic standing exercises are required to maintain sufficient hip and knee joint extension. Furthermore, standing is the best prophylaxis against plantar flexion of the feet.

CIRCULATORY SYSTEM, METABOLISM AND BREATHING

Regular standing exercises will stabilise circulation and thus increase exercise tolerance. Standing also has a positive influence on blood pressure and breathing. This is very important – especially for high-level dependency patients. Standing also serves as an osteoporosis prophylaxis.

TWO EXERCISERS IN ONE

In 2004, standing was virtually reinvented when we developed the balance unit – »dynamic standing« was born. Dynamic standing is more of a challenge and thus much more motivating for the patient. Dynamic standing exercises are always active exercises – this is why therapists appreciate them so much.

The balance unit

is equipped with a spring element that can be adapted to the patient or the therapy goal in several steps. The balance deflection is adjustable between 0 degrees, 6 degrees and 11 degrees. So you can transform your THERA-Trainer from a static standing frame (0 degrees) to a dynamic balance exerciser (6 and 11 degrees).



PLUG AND PLAY



All products from the Standing & Balancing series can be combined with a large-format 23" colour screen. Just plug it in, select a fitting therapy session with a matching biofeedback option, press the START button and start your exercise.

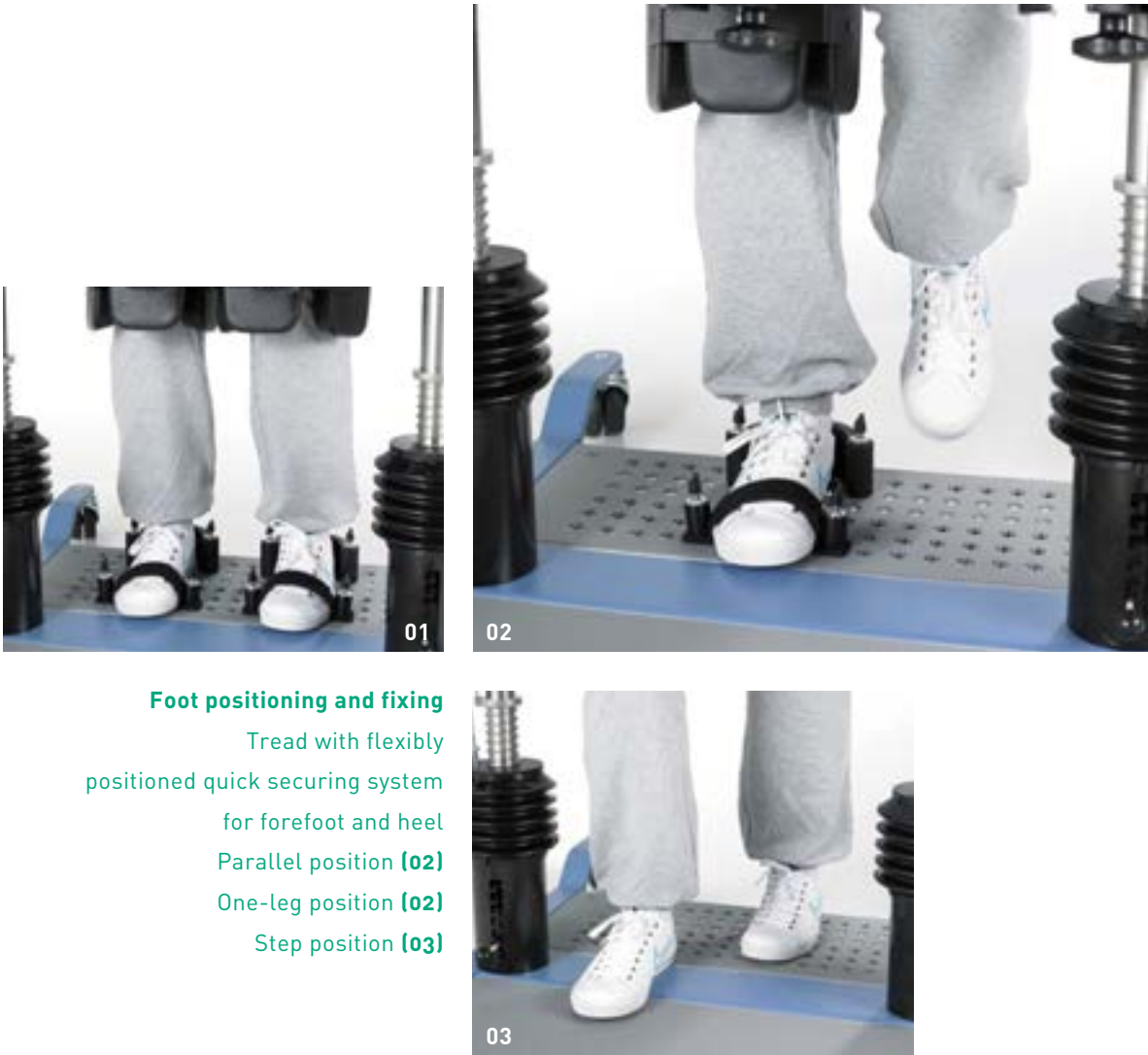
The software for Standing & Balancing products is based on a new modular concept. Therapy sessions for 20- to 30-minute exercises can be compiled from individual modules. This provides therapists with brand-new ways of individualising therapies.

Despite the variability, the products are easy to operate – in the simplest cases, only two buttons are needed. Select a suitable therapy session and start the exercise session by pressing the START button. If necessary, simply adjust the training parameters (strength, training time, etc.) to the patient's need.

THERA-Trainer coro 522
Picture includes accessories

PERFECT POSTURE

Of highest practical relevance are the flexibly positionable **quick securing systems for forefoot and heel** on the treads. No tools are needed for adjusting the quick securing systems as required for each patient's individual therapy goals. It is possible, for example, to do exercises in step or parallel position, or on one leg. The antislip tread surface prevents the patients from losing their footing. **Quick securing system and tread surfaces** are wear-resistant, washable and sanitizable. Depending on the therapy goal, knee supports can be installed or removed.



Foot positioning and fixing

- Tread with flexibly positioned quick securing system for forefoot and heel
- Parallel position (02)
- One-leg position (02)
- Step position (03)

THERA-TRAINER BALO

...THE PERFECT STANDING AND BALANCING EXERCISER FOR PATIENTS WITH HIGH-LEVEL DEPENDENCY

When it's about variability,
the THERA-Trainer balo
is second to none.

Feet, legs and pelvis can be secured
together or individually in nearly
every position possible – for every
therapy goal and every patient.
The THERA-Trainer balo is perfect
for high-level dependency
patients (even in vegetative state).



01

ELECTRIC LIFT

In accordance with the principle of dose and effect, the more often the exercising equipment is used, the more effective it will be. The THERA-Trainer balo can be equipped with an **electric lift (02)** so that even patients with high level dependency can use it every day. A patient belt is put around the pelvis of the patient sitting in the wheelchair and fixed to the belt of the electric lift. Now you can use the remote control to start the motor and gently pull the patient into an upright position, that is into the THERA-Trainer balo.

KNEE AND PELVIC SUPPORT

The model THERA-Trainer balo is equipped with **knee supports (03)** for lateral and ventral securing of the legs. The supports can be used separately or completely removed, depending on the patient's needs and the therapy goal. Naturally, the supports are cushioned, and height, distance and depth are adjustable.

The same applies to the **pelvic support (04)**. This support also consists of individual cushions whose distances and depths are adjustable so that every patient can have optimal »contact« to the exerciser for dynamic exercise. Safety bolts for the pelvic supports ensure double safety when exercising.

For users with low upper body control, an individually adjustable **upper body support** is available.

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02



03



04

(01) THERA-Trainer balo 524
Picture includes accessories

THERA-TRAINER CORO

...THE PROFESSIONAL STANDING AND BALANCING EXERCISER FOR MOBILISED PERSONS

The THERA-Trainer coro is designed for patients who can walk a few steps but have a high risk of falling. Exercising with the THERA-Trainer coro is the perfect prophylaxis against falling because they provide a fall-protected environment in which to improve strength, balance and reaction speed while having loads of fun.



01

FALL PROPHYLAXIS WITH GUARANTEED SUCCESS

»Fall prophylaxis« is an essential topic for patients, facilities and health insurance providers. According to studies, about 80 % of all patients fall again within one year after their first fall. The first fall often marks the beginning of a downward spiral that might lead to complete loss of autonomy. Medical facilities nowadays have to offer programs for fall prophylaxis. For health insurance providers, every fall generates high costs.

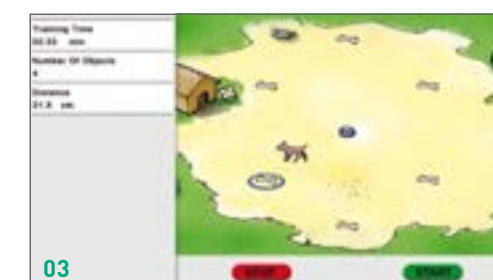
Fall prophylaxis can only be successful if an improvement of strength, mobility, fitness and reaction speed is achieved by regular repetitive exercise. That's exactly what the THERA-Trainer coro does, because the **biofeedback (02-04)** makes exercising fun.

SAFE AND FREE

The greatest challenge when designing the THERA-Trainer coro was to make it as safe as possible for the user, who is usually still able to walk – without limiting his freedom while exercising. These exercises in everyday positions (e.g. step position) are just the thing for patients who need to improve their strength, balance and reaction speed to regain their independence and confidence. For this reason, the simple **knee supports (05)** and the **pelvic safety belt (06)** are designed in such a way that they don't have any protective effect unless the patient falls or faces a lack of strength.

(01) THERA-Trainer coro 522
Picture includes accessories

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(02) Biofeedback
»Line«
(03) Biofeedback
»Collect«
(04) Biofeedback
»Ping-Pong«



THERA-TRAINER VERTO

...THE PROFESSIONAL STATIC STANDING FRAME

Static standing has been an acknowledged form of therapy for more than 30 years. The THERA-Trainer verto is perfect for therapy goals such as verticalisation, tone regulation or activation of circulatory system and metabolism. For therapy goals such as balance, mobility or upper body stability, though, dynamic balance exercisers are usually used instead of static standing frames.



01

STANDING FRAMES WITH CONVINCING QUALITIES

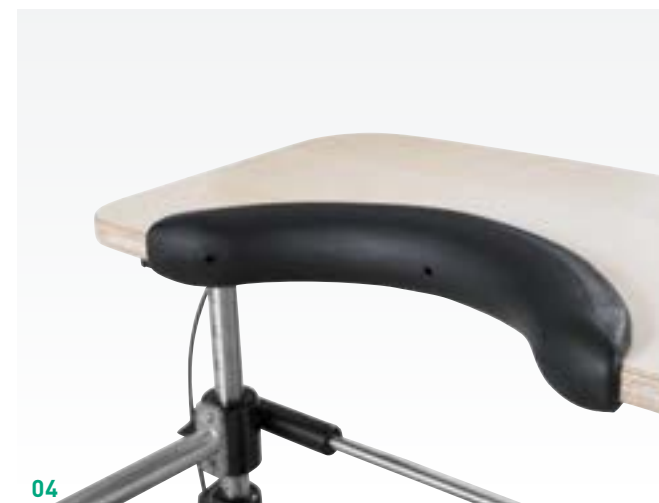
The **THERA-Trainer verto** focusses on quality and functionality. The highly wear-resistant treads offer flexible options for leg support. Its four leading castors make the THERA-Trainer verto a mobile exerciser. The table is made of high-quality Multiplex laminated wood with a very wear-resistant coat of lacquer. The table is supported by stainless steel tubes. Large format engraved height markings allow an exact height adjustment. Thanks to the gas spring, the table height can be adjusted individually on both sides. The heights of the knee supports and the handrails can be adjusted in a similar way. Find out what »Made in Germany« really means.



02



03



04

(01) THERA-Trainer verto 520
Picture includes accessories


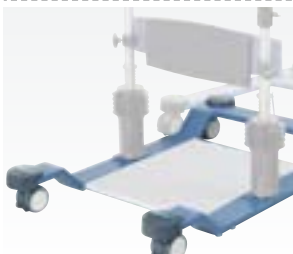
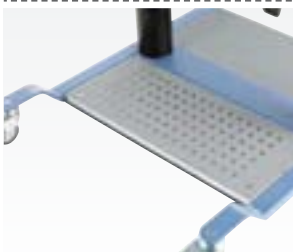


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STANDARD EQUIPMENT

STANDING & BALANCING

Basic equipment ●

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Product description		balo 524	coro 522	verto 520
BASE UNIT AND TREADS				
	Base unit balo/verto This base frame is designed as a stable metal tube frame. Four lockable transport castors with a diameter of 75 mm permit convenient transport through normal 80 cm doors or wider.	●		●
	Base unit coro This newly developed basic frame is made of 110 mm metal square tubes. Its four leading castors have a diameter of 100 mm each and can be blocked individually, which makes the exerciser especially stable, even under dynamic loads.		●	
	Treads All products of the Standing & Balancing-series are equipped with stable metal treads. The metal is coated with a highly wear-resistant antislip mat.	●	●	●
	Tread extension A tread extension makes sense everywhere patients do weight-shifting exercises in step position or similar. The extension is very useful even if a family member or a therapist is standing directly behind the patient to assist him. It can be attached or removed for transport without tools.	●		
	Tread enhancement A tread enhancement is suitable, for example, for growing adolescents. They can reduce the tread step by step from 120 mm to 0 mm as they grow.			







Product description		balo 524	coro 522	verto 520
FOOT FIXING				
	Forefoot quick securing system The forefoot securing system can easily be attached on the tread without tools in any position desired.	●		●
	Quick securing system for heels A quick securing system for heels makes sense for patients who need to have their feet secured, e.g. because of flexion spasm. The flexible system doesn't require any tools and provides safe and stable support.	●		●
STANDING AND BALANCE UNIT				
	Standing unit The stainless steel standing unit is equipped with engraved height markings. For users between 120 and 160 cm, or 135 and 200 cm with a body weight below 140 kg.			●
	Balance unit The balance unit is the patented core of every balance exerciser. Using the release lever, it can be set to 0 degrees (= static standing), approx. 6 degrees or approx. 11 degrees. It is available in a short or long version with high or low spring resistance. The spring stiffness can be adjusted in six steps without tools.	●	●	








STANDARD EQUIPMENT

STANDING & BALANCING

Basic equipment ●

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Product description		balo 524	coro 522	verto 520
KNEE, PELVIS AND UPPER BODY SECURING SYSTEM				
	Knee support simple The simple knee support serves to secure the knees. It is removable, and its height can be adjusted without tools.		●	
	Knee support For safe support, height, depth and distance of the knee supports can be adjusted without tools. The knee supports can be removed separately or together. The supports are cushioned in order to prevent pressure marks.	●		●
	Pelvic safety belt The pelvic safety belt is easily fixed to the upper pipe unit with two buckles. Then the belt length is adjusted to the patient's pelvic girth. Alternatively, two pelvic safety straps can be installed so that they form a kind of seatbelt.		●	
	Pelvic supports The pelvic supports secure the pelvis and provide comfortable dorsal and lateral support. Height, depth and distance of the pelvic supports can be adjusted to the respective requirements. While »entering « the exerciser, the pelvic supports swing to the side.	●		●
	Upper body support The upper body support is designed for people who lack upper body control (e.g. patients in vegetative state) and can be adjusted to the patient's body height without tools. Head, underarm and back cushions provide safe support.			
CONTROL AND DISPLAY UNIT				
	Control and display unit with 10.4" colour screen incl. touch function The control and display unit with 10.4" colour screen incl. touch function features the latest technologies. It sets benchmarks regarding size (211×158 mm), handling, readability and biofeedback illustrations.			

Product description		balo 524	coro 522	verto 520
	Table holder for control and display unit If you want to put the control and display unit with 10.4" colour screen on a surface (e.g. on a table), this holder is the perfect choice. A stable metal frame provides stable support for the screen. The inclination of the control unit can be adjusted.			
	Control and display unit with 23" colour screen incl. touch function This all-in-one PC is perfect for clinics. The biofeedback of the Standing & Balancing software is visualized with great brilliance. Operating the touch function fields is easy and intuitive.	●	●	
	Mobile holder for control and display unit If you want the control and display unit set up safe and stable in the room, this mobile holder is the perfect choice. A stable metal frame provides stable support for the screen. Height, distance and inclination of the control and display unit is adjustable.	●	●	
BIOFEEDBACK				
	Biofeedback »Collect« The biofeedback »Collect« allows balance exercises in all directions. The goal is to collect as many bones as possible.	●	●	
	Biofeedback »Line« This is the perfect biofeedback for exercises where a certain movement, such as weight shifting in step position, should be repeated as often as possible. The goal is to pick up as many pieces of fruits as possible in an orchard.	●	●	
	Biofeedback »Ping-Pong« With this biofeedback, the users have to systematically shift their weight from front to back or from right to left.	●	●	
	Biofeedback »Position« This diagnosis biofeedback provides information about the patient's range of motion in certain directions.	●	●	

GAIT

Another groundbreaking intelligent innovation. This will soon be known as a **milestone in gait training**.

The courage to think outside the box was the moving spirit behind the **THERA-Trainer e-go** – a product you haven't seen before. Let us show you what this new idea of gait training is about – you and your patients will be thrilled. Test the gait exerciser yourself and experience the difference.

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NEW

...STRIKE NEW
PATHS WITH
GAIT TRAINING!



GAIT THERAPY GOALS

Every patient's ultimate ambition is to regain independence, and the most important element of independence is usually being able to walk. But you can't learn to walk without walking. Whoever wants to be able to walk correctly, needs to practise.

WALKING BETTER

An important therapy goal is always to improve one's gait quality. To achieve this, the entire system needs physiological activation, that is, with physiological exercises for feet, legs, pelvis, arms and upper body.

SPEEDING UP

Another important therapy goal is the walking speed. Healthy people can adjust their walking speed depending on the situation. Too slow walking, which is often seen in neurological patients, is uneconomic and requires more energy.

WALKING DISTANCE

It makes a big difference in every patient's life whether they can walk 5 or 50 metres, since every metre makes them more independent. Strength and endurance need improving, that is, the patients must frequently exercise at their individual limits.

WALKING SAFELY

A patient who lacks confidence won't walk much. The only way to gain this kind of confidence is regular and intense gait training. However, the patients need to exercise without support or weight relief. Only this kind of exercise will trigger balance reactions that are crucial for starting to walk, turning on the spot, walking in curves or stopping.

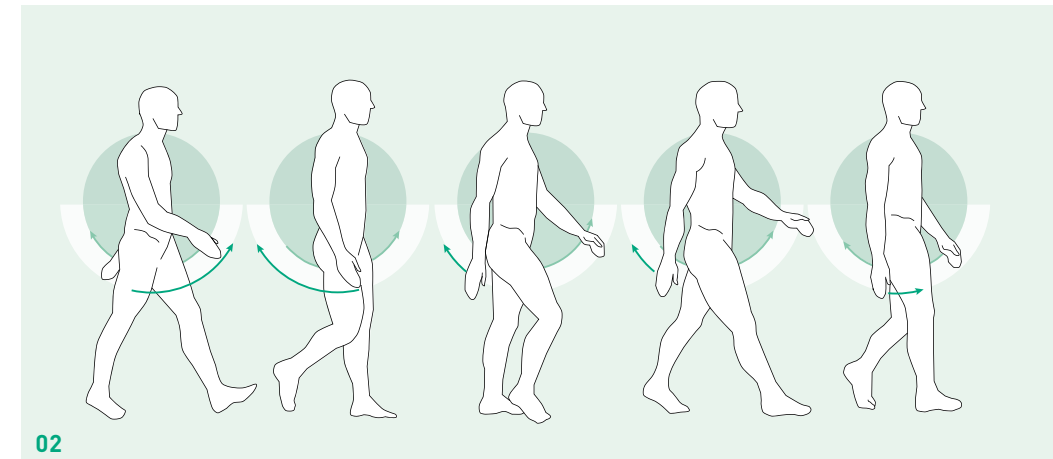
»LEARN TO WALK BEFORE YOU RUN!«

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WALKING ISN'T EASY

Walking is a very complex process that involves the entire body. When walking upright

and economically, the centres of gravity of head, upper body and pelvis form a vertical line. The arms are swinging reactively and follow the activity of the upper body, which is countering that of the pelvis. The hip extension of the standing leg triggers the next step. The pelvis is shifted forward over the supporting leg, which automatically triggers the swing phase of the leg. Walking forward is an automatic process controlled by central program generators on a spinal level.



(02) Free and natural walking. Pelvis and upper body are clearly involved.

HOW TO EXERCISE FREE WALKING?

Treadmills with partial weight relief will often influence the upper body by using belts or suspension systems. Thus, treadmill exercises are perfect for trying one's first steps in the early stages of rehabilitation.

But the patient should start walking on the floor as early as possible. Usually, patients use high walking frames (underarm walking frames) with or without seats. As an alternative, they can exercise with walkers or parallel walking bars. With all these aids, the patient's upper body and arms fulfil a support function that prevents their use in the dynamic walking process. The perfect exercise would be having the patients walking in a room where there is no danger of falling while at the same time the entire body is involved in the walking process. By allowing »real« walking, e.g. with zigzags and left and right turns, the THERA-Trainer e-go makes this type of gait training possible.



THERA-TRAINER E-GO

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...THE INNOVATION IN GAIT TRAINING!

The THERA-Trainer e-go is suitable for all patients who are able to stand on the floor in a safe environment. The THERA-Trainer e-go is the perfect exercise partner from the first steps all the way to endurance gait training. The THERA-Trainer e-go doesn't care whether you do your exercises in a gym, in a hallway at least 3 m wide, or in a special gait training facility – it turns on the spot.



01

SECURED AT THE CENTRE OF GRAVITY

The pelvis as the link between upper body and legs is crucial for walking. It supports the muscular stabilisation of the joints involved while at the same time keeping up the dynamics in the direction of walking. Sufficient pelvic mobility is a basic requirement for a physiological and economic gait pattern. The THERA-Trainer e-go supports the patient with a special **pelvic safety belt** on stable brackets. Thus, the pelvis is supported to keep the centre of gravity in a position suitable for walking. The securing system doesn't influence the upper body at all. Thanks to the balance function, the secured pelvis can execute its function as a dynamic stabiliser in realistic situations and remains flexible in all directions.

By the way: The THERA-Trainer e-go works just as well in the opposite direction. Then the patients will have nothing in front of them but two handrails left and right – they'll be walking »into the open«.



(02) Patient secured in THERA-Trainer e-go

(01) THERA-Trainer e-go 526
Picture includes accessories

FULL SPEED AHEAD



The THERA-Trainer e-go is equipped with a **drive block (01)** with an electric motor and 25 cm solid rubber tires on each side. The drive wheels move the THERA-Trainer e-go around at the set speed (0–3.5 km/h). **2 batteries (2)** in the front part of the THERA-Trainer e-go supply the **electric motors**. A shock-resistant and easy-to-clean cover protects the batteries and the electronic control system.



(01) Drive block with balance function
(02) Battery unit with electric connectors

EVERYTHING UNDER CONTROL



A **control and display unit** with 2.7" colour screen makes it easy to operate the THERA-Trainer e-go. The following **exercise parameters** can be set:

- Speed fast/slow
- Direction right/left
- Direction forward/backward

After the session, the unit displays exercise time, average speed and distance covered.

Depending on the patient's cognitive skills, the therapist or therapy assistant can operate the unit. Safe operation is guaranteed at any time. There are three ways to **stop** the THERA-Trainer e-go:

- By pressing the STOP button on the control and display unit
- By pressing the SAFETY-STOP button on the top cover
- By one of the four safety bumpers on the basic frame. As soon as these hit an obstacle, the electric motors will stop automatically.



(03) Control and display unit with holder
(04) Safety bumper with emergency stop

STANDARD EQUIPMENT

GAIT

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Product description

BASIC EQUIPMENT E-GO



Base unit
The base unit is made of a stable warp-resistant 110 mm tube frame. It is equipped with 4 leading castors with 100 mm tires.



Drive
The exerciser is equipped with a 100 watt electric motor on each side. The solid rubber tyres have a diameter of 25 cm. The drive blocks can be raised for transport. If the THERA-Trainer e-go needs to fit through doors less than 90 cm wide, the drive blocks can be removed.



Battery
The battery unit consists of two 12-volt batteries. The stand-by time in continuous operation is approx. 8 hours. With the provided charger the battery can be recharged. A plastic cover protects batteries and motor control unit from mechanical loads and dirt.



Safety bumpers
Safety bumpers on every end of the metal frame offer additional safety. If a safety bumper hits an obstacle, the motors will stop automatically.



Balance unit
The balance unit is the patented core of the THERA-Trainer e-go. Using the release lever, it can be set to 0 degrees (= blocked), approx. 6 degrees or approx. 11 degrees. It is available in a short or long version with high or low spring resistance. The spring stiffness can be adjusted in six steps without tools.

Product description



Upper pipe frame
The upper pipe frame with handrails is equipped with two holding brackets. The distance between them can be adapted to the width of the patient's pelvis. These holding brackets are equipped with three belt buckles each for fixing the pelvic safety straps. The two handrails provide additional safety, especially when transferring the patient into the THERA-Trainer e-go.



Stomach cushion
The depth of the stomach cushion can be adapted without tools. It is easy to clean and sanitize.



Pelvic safety belt
The pelvic safety belt with two cushioned leg straps provides additional safety. The pelvic safety belt is available in sizes S – XXL so as to meet individual requirements.



Cushion for arm rest
The flexible cushion serves as a soft rest for paretic arms and can be put on the upper pipe frame if required. It is easy to clean and sanitize.



Control and display unit with 2.7" colour screen
The control and display unit controls the drive unit of the THERA-Trainer e-go. Important exercise parameters such as speed and change of direction can be easily set.



Holder for control and display unit
The holder for the control and display unit is put on the upper pipe frame. The holder is equipped with a flexible arm that allows the therapist to walk beside the patient and operate the THERA-Trainer e-go.

FACILITY PLANNING

Before we even start planning, we'll talk about your ideas and goals to **analyse your requirements**. We'll help you establish detailed therapy, equipment, financial and service plans. Benefit from our know-how – we'd love to share with you.

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...CUSTOM-MADE
JUST WHAT
YOU NEED



FROM THE FIRST IDEA TO YOUR VERY OWN THERA-TRAINER PACKAGE

INFORMATION & ADVICE

You can find all relevant information in this catalogue, in our price list and on our website. You'll find immediately that our helpful and competent employees with their long years of experience are eager to find the best solution for you and any special requests you might have.

TRYING & TESTING

Our best recommendation is to come and test our THERA-Trainers yourself. Maybe you want to visit one of our reference centres. Here you can see our exercisers in action – or test them yourself. As an alternative, we're always happy to see you in our factory in Hochdorf. Here we can give you the most interesting insights in our development and production processes.

PLANNING & OFFERS

Depending on the type and number of your patients, your room situation and therapy goals, **we can help you establish a therapy and equipment plan and prepare a written offer for you.** We'll focus especially on your in-house processes.

**WE'LL ASSIST
YOU WITH EVERY STEP!**

EQUIPMENT PACKAGE GERIATRIC

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Much more than for young people, regular exercise is vital for the elderly.

Sometimes it's hard to motivate elderly persons for the daily activity and exercise that are so crucial to their health. But THERA-Trainers have proven to be very popular especially with the elderly. They are easy to use, the biofeedback makes exercise fun, and the users will soon realise just how much better regular exercise makes them feel. Additionally, the acceptance level among the elderly is so high because exercise with THERA-Trainers makes them feel safe, and safety plays a major part in their lives.

The equipment package »GERIATRIC« can improve the patient's strength, endurance, mobility and reaction speed as well as cardiovascular circulation and metabolism. The package is also perfect for fall prophylaxis.



The equipment package »GERIATRIC« includes the following models:

- 1 x THERA-Trainer tigo 502
- 1 x THERA-Trainer tigo 506
- 1 x THERA-Trainer coro 522

EQUIPMENT PACKAGE STANDING & BALANCING-REHA

Standing and balance are central elements of therapy in every rehab hospital. Patients should stand for at least one hour a day. The equipment package »STANDING & BALANCING-REHA« provides you with a perfectly engineered, sophisticated unit that allows (dynamic) standing exercises in groups. As an alternative, it is possible to provide individual therapy sessions for patients with high-level dependency.



The equipment package »Standing & Balancing-Reha« includes the following models:

- 1 x THERA-Trainer verto 520
- 2 x THERA-Trainer coro 522
- 1 x THERA-Trainer balo 524

EQUIPMENT PACKAGE CYCLING-REHA

The »CYCLING-REHA« package allows for up to 4 patients to play one of the biofeedback-controlled games together. The therapist or therapy assistant decides which patients will take part in the group exercise. Most patients like group sessions much better than exercising alone. More fun means more motivation, and more motivation means longer sessions. Group exercise gives the sessions a social component, and the relatives will see how different therapy can be. Every THERA-Trainer from the Cycling series has its own screen and can be used separately for individual exercise as well.



This equipment package »CYCLING-REHA« includes the following models:

- 2 x THERA-Trainer tigo 506
- 2 x THERA-Trainer tigo 510

SERVICE

»It runs and runs and runs!« – this was one of VW's most popular slogans for the Beetle. THERA-Trainers are designed to run just as reliably and to be used every day. Beside top quality, delivery, set-up and staff training, this requires regular service and a reliable supply of spare parts. **Our service makes sure that your THERA-Trainers keep running.**

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...MAKES THE
DIFFERENCE



A RELIABLE PARTNER THERA-TRAINER

...A BRAND BY MEDICA
MEDIZINTECHNIK GMBH



For more than 20 years, **medica Medizintechnik GmbH** in Hochdorf has been developing and selling professional therapeutic equipment for neurological and geriatric rehabilitation. The company was founded by Peter Kopf, who has remained its head to this day. Today, he and Otto Höbel – responsible for all technical departments – are the company's managing directors. They attach great importance to sustainable development and customer-friendly products and solutions. Together with more than 100 employees, they have acquired an excellent reputation for the company's capacity for innovation, its professionalism and reliability.



CUSTOM-MADE EVERYTHING YOU NEED

Buying a THERA-Trainer is a decision for excellent service and all-round customer support. Let us introduce you to the THERA-Trainer service concept. Because service is just as important to us as the quality of our products.

ANYTHING YOU NEED

Our broad range of products which we keep optimising to keep up with our customers' requirements provides the perfect products and accessories for every requirement and budget.

WORDS & DEEDS

All medica employees would love to help you and quickly and competently answer all your questions. Contact us:

Phone **+49 7355-9314-0**

E-Mail **info@thera-trainer.de**



WARRANTY

All THERA-Trainers are guaranteed quality products. Should you ever have a reason to complain, we'll do everything to solve the problem.

7 YEARS SPARE PART SERVICE

And when something is broken? We will supply spare parts for discontinued models for at least seven years.

TECHNICAL SERVICE

Experienced service technicians will help you with technical problems. If you want your exercise equipment in perfect condition and working flawlessly, please ask your local dealer. He will be pleased to help you.



DELIVERY SERVICE

We don't just leave a box on your doorstep. Only when your THERA-Trainer is delivered, unpacked and set up, and you know how to handle it and start exercising right away – then our work is done.

TEST SERVICE

The best way to get to know our THERA-Trainers is visiting a reference facility. Mostly, these are hospitals or doctor's offices. There you can see the THERA-Trainers in action. You might also want to come to the medica headquarters in Hochdorf to test our THERA-Trainers and maybe treat yourself to a factory tour. Other opportunities to test are trade fairs, congresses or a special workshop for key customers. You can find our calendar of events on our website **www.thera-trainer.de**.

TRAINING AND INSTRUCTION

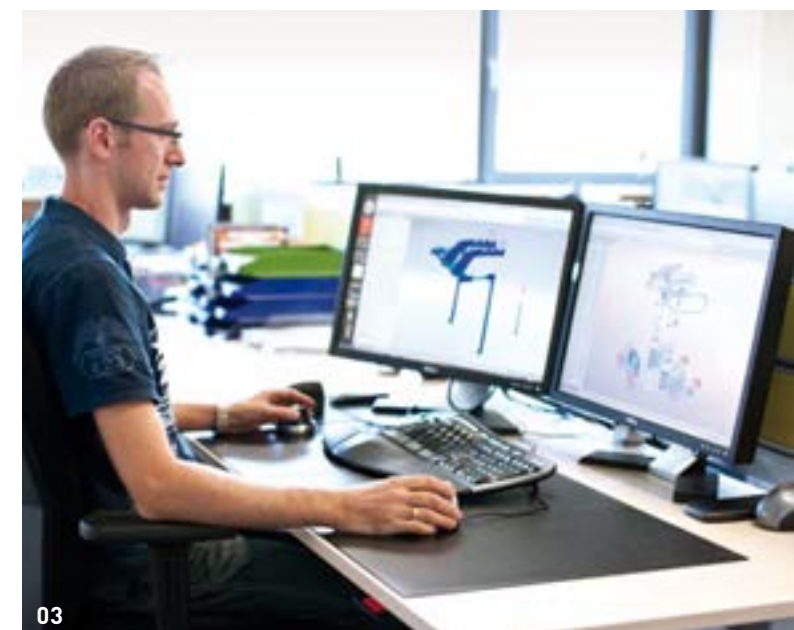
Any therapeutic equipment can only be as good as the users are trained. That's why we hold our workshops for therapists interested in our THERA-Trainers and therapy concepts. We also offer service training for service technicians. We can hold training courses at your facility as well.

THERA-NEWS

THERA-NEWS keeps you up to date on the latest in device-based exercise and new developments at medica. You will get our THERA-NEWS e-mail newsletter for free several times a year.

FACTORY TOUR

medica Medizintechnik GmbH is proud on being an international company. You're welcome to visit us any time. Just fix a date and come to Hochdorf. A personal tour awaits you in the factory where we have been developing and constructing exercisers for more than 20 years. We're looking forward to meeting you.



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(01) Customer support

(02) Service

(03) Construction

