Continuous passive motion *lower limbs*

FISIOTEK 3000 *Series*

A range of models meets the operators' various needs. It ranges from the model that allows you to work on three joints – knee, ankle and hip – to the more specific model for the knee including the simple and compact instrument suitable for rental.

Distinctive elements:

- Fisiotek 3000 is intended for use in rehabilitation to restore joint movement in both surgically and non-surgically treated medical conditions. It is therefore suitable for the needs of a considerable range of patients.
- Its internal software has new programmable features that are useful and easy to use to customise therapy and promote the comfortable, gradual and effective recovery of joint mobility.
- The line's design makes use of high quality materials, such as aluminium and stainless steel to ensure greater dependability over time. The models' linear frame and harmonic structure are pleasing to the patient and instil confidence.
- The remote-control START & STOP functions and hand-held programmable keypad (optional) offer two ways to control the movement of the device: these two handsets are interchangeable and use the same connector.
- Each model of the 3000 line is equipped with a Warm Up feature that can be used to warm the joint before therapy actually begins.

Treated pathologies:

- Arthrotomy, arthroscopy
- Treatment following mobilization
- Surgical treatment of fractures
- Reconstructive surgery
- Endoprosthetic implants
- Operations on soft tissue

Plantarflexion of the ankle using Fisiotek 3000 TS

Dorsiflexion of the ankle using Fisiotek 3000 TS

Flexion-extension movement of the hip with Fisiotek 3000 E

Continuous passive motion *lower limbs*

Made in Italy

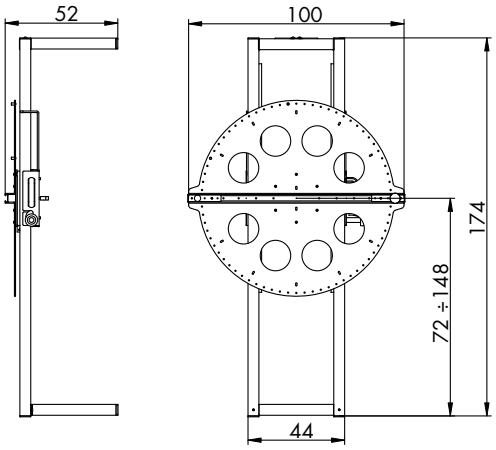
TECHNICAL FEATURES					
CODES	XRI001	XRI002	XRI003	XRI004	XRI005
MODELS	Fisiotek 3000 GS	Fisiotek 3000 G	Fisiotek 3000 E	Fisiotek 3000 TS	Fisiotek 3000 N
Knee and hip mobilization	•	•	•	•	•
Ankle mobilization				•	
Use of memory card	•			•	
Speed control (flexion/extension)	•	•		•	
Speed control			•		•
Workout duration control	•	•	•	•	•
Resistance	•	•	•	•	•
Automatic extension increase	•	•		•	
Automatic flexion increase	•	•		•	
Pause during extension	•	•		•	
Pause during flexion	•	•	•	•	•
Warm Up cycles	•	•	•	•	•
Adjustable foot rest	•	•	•		
Knee movement range	-10° ÷ 120°	-10° ÷ 120°	-10° ÷ 120°	0° ÷ 110°	0° ÷ 110°
Ankle movement range				20° ÷ 0° ÷ 40°	
Hip movement range	-7° ÷ 115°	-7° ÷ 115°	-7° ÷ 115°	-7° ÷ 115°	-7° ÷ 115°
Automatic extension increase limit	•	•		•	
Automatic flexion increase limit	•	•		•	
Repetitions at extension limit	•	•	•	•	
Repetitions at flexion limit	•	•	•	•	

DIRECTIVES – REGULATIONS - LOGISTICS					
CODE	XRI001	XRI002	XRI003	XRI004	XRI005
Power supply	110 ÷ 230V - 50 ÷ 60Hz				
Electrical safety	Class 1 B Standard EN 60601-1				
Electromagnetic compatibility	Group 1 B Standard EN 60601-1-2				
Classification as per EEC Directive 93/42	Class IIa				
Net weight	9,5Kg	9,5Kg	9,5Kg	14Kg	14Kg

ACCESSORIES					
CODE	XRI001	XRI002	XRI003	XRI004	XRI005
	Fisiotek 3000 GS	Fisiotek 3000 G	Fisiotek 3000 E	Fisiotek 3000 TS	Fisiotek 3000 N
 **01840** ACCESSORY FOR LIMBS SMALLER THAN 72 CM This accessory can only be mounted on models FISIOTEK 3000 TS and 3000N. It can be used in the rehabilitation of limbs having length between 61 cm and 72 cm for a range from 0° to 110°.				•	•
 **01841** FISIOTEK TROLLEY This trolley is designed to solve any problems with transportation and location within a ward or rehabilitation centre. Easy and functional, it is fitted with non-slip supports for the Fisiotek machine and tray.	•	•	•	•	•
 **02099/02093** FLOATING KEYPAD With its graphic, user-friendly display, this keypad allows for the equipment to be fully programmed with great simplicity. The graphic symbols provided are self-explanatory.	02099	02099	02099	02093	02093

01347 WALL-MOUNTED "ROTA"

It is a device for performing maintenance exercises for the shoulder and elbow in the event of fracture outcomes, less serious impingement syndromes and rigidity caused by arthrosis. It consists of a wall-mounted metal frame featuring a height-adjustable wheel to suit the patient's size or the exercise to perform. The device is fitted with a handle and knob that allow a wider range of exercises compared to the "Lapidari's wheel" from which it derives. Patients can work both sitting and standing, start their active exercises in free mode and then, by means of a clutch, gradually apply a greater resistance. Using this instrument enables the therapist to avoid the most repetitive work while the cooperative patient performs the activity in total safety. The "Rota" comes complete with a manual and videotape that show a series of exercises. A set of accessories can be ordered to increase the variety of exercises offered by this aid.
Dimensions: 174 x 100 x 52 cm; Weight: 29 Kg.



MESSAGE TO ALL THOSE INTERESTED:
The "Rota" rehabilitation device facilitates the most up-to-date rehabilitation methods: it allows the physiotherapist to teach how to stabilize the scapulothoracic joint during the active movement of the gleno-humeral joint, which is controlled by the device; it allows the patient to be in an upright position while working, thus activating the whole kinetic chain; it assists in performing proprioceptive exercises; it allows extrarotators to be trained during an abduction movement, which can be generated nearly without involving the deltoid muscle, thus avoiding non functional positions.

CE


Resistance control with 8 settings


Height adjustment 72÷148 cm

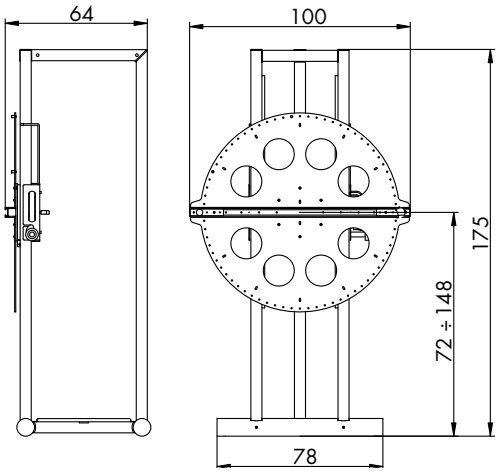
Range of motion level indicators

Optional Accessories

AC0711 SET OF ACCESSORIES
Includes: 1 forearm support, 1 counterweight, 1 elbow rest, 1 front grip handle.

01348 MOVABLE "ROTA"

This device is for shoulder and elbow rehabilitation in cases of stiffness, impingement syndrome and pre- and post-surgery treatment. It has a metal frame and a height-adjustable wheel to suit the patient's size or the exercise to perform. It can be easily moved by an operator. It comes complete with a set of accessories, including: a handle, a knob, a forearm support, a counterweight, an elbow rest and a front grip handle. The accessories supplied allow performing a wider range of exercises compared with the wall-mounted version. Mainly used to perform active exercises, it can also be used to do passive/self-passive mobilization and proprioceptive exercises. Patients can start their active exercises in free mode and then, by means of a clutch, gradually apply a greater resistance. Using this instrument enables the therapist to avoid the most repetitive work: the physiotherapist programs the sequence and intensity of the exercises, while the patient can check the range of motion reached at each repetition and is therefore motivated to work harder. The range of motion recovery can be monitored with a quick and extremely reliable assessment by comparing the previous and subsequent results. The "Rota" comes complete with a manual and videotape that show a series of exercises.
Dimensions: 175 x 100 x 64 cm; Weight: 55 Kg.



CE

Resistance control with 8 settings

Height adjustment 72÷148 cm

Tool movement

Standard Accessories

It comes complete with a set of accessories, including: a handle, a knob, a forearm support, a counterweight, an elbow rest and a front grip handle.

Exercises to be performed with ROTA

The exercises that can be performed are suitable for patients with shoulder and elbow stiffness, impingement syndrome, and in pre- and post-surgery treatment; most of them are active exercises, but also passive or self-passive mobilisations and proprioceptive exercises. The names of the exercises refer to well-known movements and gestures, for easy identification by patients.

The **active exercises** can be either active-assisted or resisted exercises, either general or selective.

The **passive mobilisations** are performed in a selective way and in one direction, following the principles of mild stretching (gradually assuming the stretch position, end of passive movement decided by the patient, holding the stretch position for a reasonable period of time, active return to rest position, repetition), to be associated with active control of the scapula; they can also be performed in a seated posture and are suited to the elderly; the mobilising force is supplied by the counterweight.

In **self-passive mobilisation,** the force to move the damaged limb is supplied by the controlateral limb; such mobilisations can be more vigorous and there are definite contraindications to performing them in some directions; as a rule, they should be included in a program for young people.

In the intended **proprioceptive exercises**, the patient's only task is to recognize the actual position of the limb, which is slowly moved by the wheel; in order to carry out this task, the patient must become fully aware of his/her proprioceptive sensitivity. They are suited to achieve automatic muscle coordination of the humeral head stabilizers and also for motion recovery in conditions such as antalgic contracture, both post-traumatic and inflammatory.

In the end, the use of "ROTA" is intended for cooperative and normally intelligent patients, as is the case of adult patients with fractures or impingement syndrome. Brain-damaged patients with central lesions such as the hemiplegics can benefit from using this new device, though with significant restrictions (strengthening is not recommended, passive mobilisation not easy, while proprioceptive exercises are useful). The manual mainly describes the logic behind the exercises; we will describe the most frequent lesions and proceed to describe the possible exercises and, finally, the practical use of the device.

Finally, the wheel allows monitoring range of motion (ROM) recovery by providing quick and reliable assessment, based on comparison between previous and following measures. Being able to check the degree of joint motion reached in each repetition, the patient will feel motivated, encouraged and engaged in exercise.

Dr. Paolo Rispoli

01448
"ROTA" GUIDE
This manual explains how to use the device through a set of exercises.

In details:
- Exercises for shoulder fractures involving the glenohumeral joint;
- The impingement syndrome exercises;
- Proprioceptive exercises;
- Exercises for diaphyseal and distal fractures of the humerus;
- Eexercises for fractures of the forearm;

01447.DVD
VIDEO ROTA
This video describes a range of exercises for use with the "Rota".

REHABILITATION

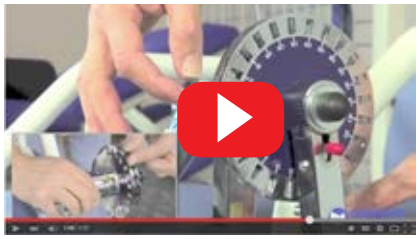
EXERCISES SUGGESTED		EXERCISE DESCRIPTION	AIM OF THE EXERCISE	PASSIVE	SELF-PASSIVE	ACTIVE	AGAINST RESISTANCE	STANDING	SITTING
	**Arm cycling**	Active, complex and not selective movement;	GH, ST, KC activation and stabilisation: powerful but difficult to regulate			•	•	•	
	**Cycling exercise with the shoulder only**	Active movement, performed only by the ST and KC;	GH stabilisation, ST and KC activation and stabilisation			•	•	•	
	**Steering wheel**	Self-passive mobilisation in vigorous flexion;	Range of motion improvement in flexion for young, not suffering individuals		•			•	
	**Level crossing**	Passive stretching in flexion, very gently;	Range of motion improvement in flexion for elderly or patients intolerant of pain	•					•
	**Anterior windshield wiper**	External rotation in flexion	Range of motion and strengthening in external rotation, GH stabilisation through strengthening	•		•	•	•	
	**Lateral windshield wiper**	Active movement in external rotation, in abduction, with progressive increase	Increasing abduction through capsule stretching in active internal and external rotation			•		•	•
	**Intermediate windshield wiper**	External rotation in intermediate position, flexion-abduction	External rotation in impingement syndromes, GH stabilisation through strengthening			•	•	•	
	**Draining rack**	Active external rotation + passive abduction according to layout	Passive abduction associated with active external rotation for retracted capsule mobilisation, against impingement, GH stabilisation through external rotator strengthening	•		•	•	•	•
	**Watch setting**	Coordinated activation of GH and ST stabilisers	GH and ST dynamic stabilisation			•		•	
	**Inclined plane lunge**	Coordinated activation of GH, ST and KC stabilisers	GH, ST and KC dynamic stabilisation				•	•	
	**Low Parry**	Coordinated activation of GH, ST and KC stabilisers	GH, ST and KC dynamic stabilisation			•	•	•	
	**Thrust from below**	Coordinated activation of GH, ST and KC stabilisers	GH, ST and KC dynamic stabilisation			•	•	•	
	**Proprioceptive**	Recognition of joint position actively or passively, in several directions	Reduction of antalgic contracture; enhancement of GH and ST activator coordination	•		•		•	•

Key: • GH > Glenouhumeral • ST > Scapulothoracic • KC > Kinetic chain

Arti Rehab *multifunction rehabilitation chair*

07465 ARTI REHAB

Multi-function rehabilitation chair for the lower and upper limbs and muscle exercises. The swinging arm can be used from both sides. Resistance is achieved by applying 4 weights of 2 kg each, 1 weight of 1 Kg and a weight of 0,5 Kg. It is possible to adjust the degree of resistance, exclude a movement and select each segment to be exercised. The 90° backrest can be positioned horizontally by means of servoassisted gas spring with mechanical stop to allow for exercising the limb from a prone position. The legs can be secured with a practical, adjustable padded roll system, while the feet can be secured with an adjustable length strap and fastening clips.



Arti Rehab is a machine used to strengthen the lower limbs, in terms of both extensor and flexor muscles. It is made up of a chair that is easy to use even for those that have difficulty moving. It has a reclinable backrest, which makes it possible to position the patient correctly.

02069.DVD

EXERCISES MANUAL AND VIDEO

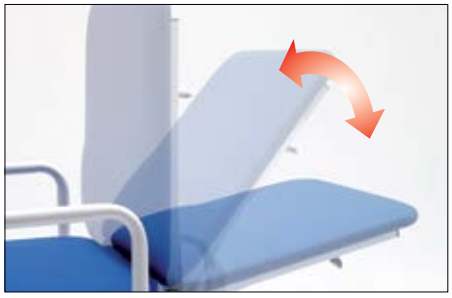
A useful reference containing “Arti Rehab” video lessons and a thorough exercises manual. Contains: User manual, therapy manual and exercises, DVD video. The present support is provided with “Arti Rehab” code. 07465.

CE

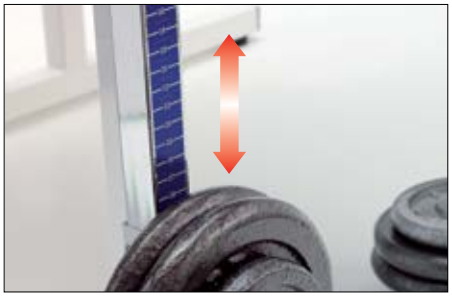
The extent of the movement and application point are adjustable independently.

TECHNICAL FEATURES		
	DIMENSIONS	
OVERALL	Width x Length x Height (cm)	71 x 85 x 125
SEAT	Width x Depth x Height (cm)	60,5 x 54 x 66
BACKREST	Width x Height (cm)	55 x 59
	FOR LOWER LIMBS EXERCISES	
	Maximum loading weight on arm (kg)	9,5
	Additional loading arm	Optional
	FOR UPPER LIMBS EXERCISES	
	Recommended special hand grip	Accessory
	Patient positions	Sitting, prone/supine
	Possibile exercises (manual available)	Wide range
	Working safety load (kg)	135
	Tilting back rest	-90
	Back rest adjustment	by gas spring
	Total Weight of the device (kg)	35

Comfortable restrain support, height adjustable.



Adjustable backrest, servo-assisted by gas spring.



Height adjustable load arm with reference scale.

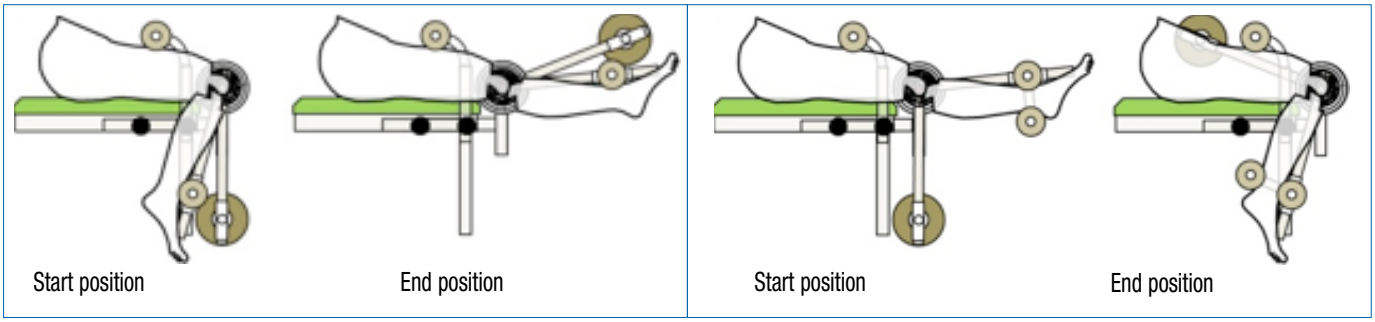
Arti Rehab *multifunction rehabilitation chair*

Made in Italy

INTENDED USE:
This equipment is particularly suitable for use in outpatient departments, medical centres, rehabilitation centres, and gyms that offer complete rehabilitation programmes, aimed at regaining muscular trophy of the lower limbs.

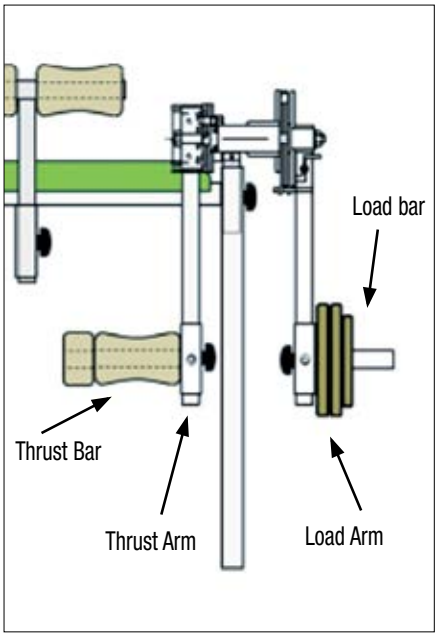
Type of work to be done - execution mode
Limb Rehab can be used for various types of exercises that differ in terms of the type of contraction, in order to achieve complete rehabilitation of joint and muscular functions, compromised by trauma or illness. Concentric - eccentric as well as isometric work can be done.

THE DUAL LEG EXTENSION AND LEG CURL FUNCTION



LEG EXTENSION
When sitting on the machine with the thigh resting on the seat and the leg bent and touching the thrust arm, extend the leg at the thigh against the established load (P). Motion muscles - Femoral quadriceps: vastus medialis, vastus lateralis, vastus intermedius.

LEG CURL
When sitting on the machine with the thigh resting on the seat and the leg extended and touching the thrust arm, bend the leg at the thigh. Motion muscles - Femoral biceps: Semitendinosus, Semimembranosus, Gastrocnemius.



Optional Accessories

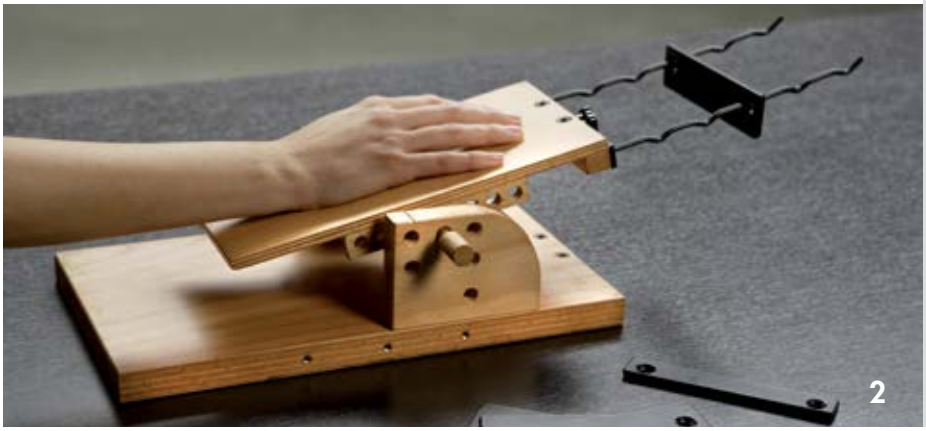
07466 ADDITIONAL ARM
Additional support if both limbs are used. The leg fixing system makes it possible to adjust the height to a comfortable position. An adjustable extension belt with closing clips, secures the end of the limb. Weights provided: 4 x 2 kg; 1 x 1 Kg; 1 x 0,5 Kg.

AC0700 ARTI REHAB HAND GRIP
Hand grip that extends the exercises range up to the upper limbs. It's applicable to the thrust arm, replacing the padded roll for lower limbs.

Neurocognitive *Rehabilitation*

01891 LEONARDO COMPLETE

This kit includes the same accessories found in the Leonardo Modular Board and Positional Feedback systems, plus another series of valuable aids for the rehabilitation process in orthopedic and neurological pathologies that help design specific exercise program for the patient's pathology. The kit has been designed to control movement and plan therapy exercises, and provides an immediate answer to the various therapeutic needs of the daily gym exercise. Thanks to its modular structure, it allows creating numerous therapeutic aids, significantly reducing the quantity of tools required. This ensures an opportunity for professional intervention even at the patient's home. The special connecting systems supplied make it possible to easily set up the various therapeutic aids.



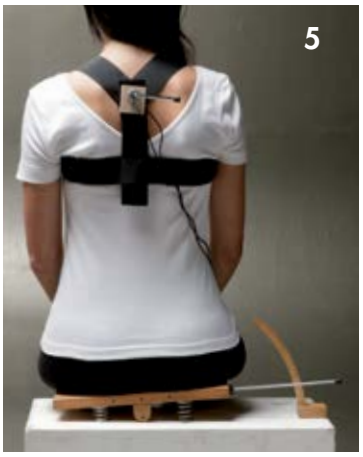
EXAMPLES OF APPLICATIONS

1. These aids help design tasks aimed at developing the kinematic recognition by the various body regions. In this case, the patient is guided towards recognizing the prono-supination positions for the forearm.

2. Weighing tasks can also be performed using the supports that can be fitted to the aids. Depending on their muscular capabilities, the patient is asked to press on the board to recognize the amount of load placed at the opposite end.

01314 LEONARDO GUIDE

Manual containing a sequence of exercises, showing the many possibilities for using the system.



EXAMPLES OF APPLICATIONS

3. Fingers' weighing request while the patient's hand is placed on the small oscillating board. The aid's holes allow identifying the appropriate heights and lever arms; extending the aid allows for combining kinesthetic recognition tasks.

4. This aid covers a series of simple activities having the purpose of carrying out tasks that involve following trajectories laid by modeling the copper wire as required each time. Any possible inaccuracies in performing the task are highlighted by the feedback mechanism.

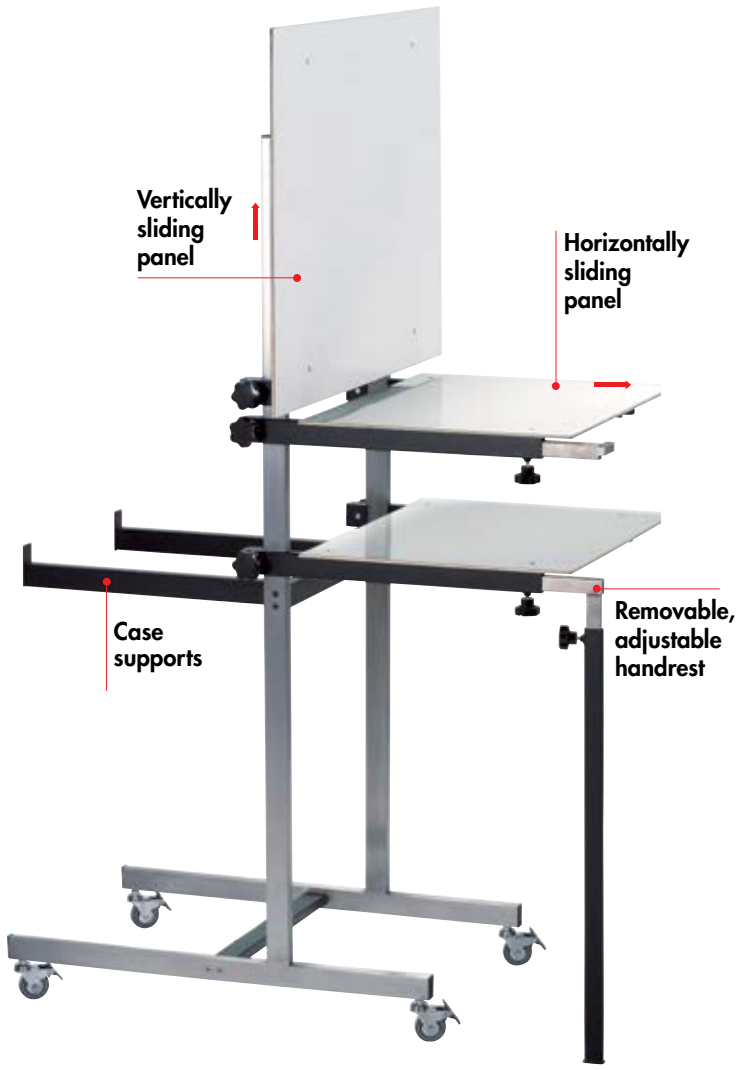
5. The patient is asked to reach various degrees of pelvis tilt, while trying to stabilize the trunk on the frontal plane through the inclinometer.

6. The patient lies on two oscillating boards and is asked to reach various degrees of pelvis tilt while keeping the board under the shoulder girdle stable. If the trunk is not segmented, the feedback system is activated.

7. The patient is helped to complete the dorsiflexion at ankle during the weight-bearing phase, asking him to wait for the acoustic signal from the goniometer before raising his/her heel from the ground.

8. In static posture, with segments aligned, the fixed antenna can reproduce the movement of the barycentre. The oscillations of the body, consequently the barycentre of the patient, are graphically indicated by the tip of the antenna.

01294.DVD
VIDEO LEONARDO
This dvd contains instructions for using the Leonardo modular system.
Follow us on YouTube



01084

MULTIFUNCTION TABLE

This multifunction table was designed to be used in combination with a gym workout, along with the **Leonardo** kit. The system offers the chance to lay the therapist's case at a comfortable height, on a desktop provided with braked swiveling wheels. Exercises can be performed with the highest degree of flexibility thanks to two horizontal tops that can independently slide along two vertical steel tubes. A simple and quick fastening system has been designed to reach the various workstations. The table is fitted with a comfortable and safe, height-adjustable handrest for the patient, left or right side.

The patient is required to lower the board to recognize the various heights, while not pulling back the tibia in order not to activate the inclinometer. The result is the voluntary muscle lengthening of the plantar flexors.

EXAMPLES OF APPLICATIONS

1. Abduction of the upper limb with the hand resting on the board positioned on the magnetized spheres. The thoracic indicator connected to the FB system, with its optimal calibration range, signals the failed dissociation between the trunk and arm.

2. The patient is asked to relax the limb, by flexing the left knee until the goniometer is activated in the flight phase. The laser applied at the side of the pelvic indicator describes the behaviour of the pelvis on the frontal plane, so as to quantify the elevation of pelvis or trendelenburg.