## Rehabilitation

1.	Contino	us Passive Motion	page	136
	1.1 F	isitotek LT-P for wrist	page	136
	1.2 F	isitotek LT-G for elbow	page	137
	1.3 F	isiotek LT for shoulder	page	138
	1.4 F	isiotek HP2 for upper limbs	page	139
	1.5 F	isiotek 3000 series for lower limbs	page	140
2.	ROTA™	for shoulder and elbow pathologies	page	142
3.	ARTI RE	HAB™ multifunction rehabilitation chair	page	146
4.	Cycling	- medical line	page	148
	4.1 R	ehabike Magnetic line	page	148
	4.2 R	ehabike Elite line	page	150
5.	Fitness	line	page	155
	5.1 E	xercise bikes	page	155
	5.2 E	rgometers	page	157
	5.3 R	owing machines and steppers	page	159
6.	Proprioc	eptive boards	page	160
7.	Other p	roprioceptive devices	page	166
8.	Bands,	cords, weights and dumbells	page	168
9.	Position	al feedback	page	170
10.	IFONAR	DO™ Complet for neurological pathologies	page	172

## Continuous passive motion for wrist

#### XRIOO7 FISIOTEK LT-P

The Fisiotek LT-P is a mobilizer used for the passive rehabilitation of the wrist, by means of flexion-extension and ulnar-radial deviation movements. The structure of the device provides great stability and precision of movement to ensure effective recovery. The programming of the Range of Movement is done electro-mechanically. The graphic scale on the central disc makes programming easy and intuitive. It is possible to adjust the height of the unit; the movement can be supervised by remote control with Start & Stop. Quality mechanical parts ensure the correctness of the movement over time.

#### Therapeutic Indications

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



TECHNICAL FEATURES				
Wrigh	Flexion-extension	80° ÷ 0° ÷ 80°		
Wrist	Ulnar/radial deviation	20° ÷ 0° ÷ 30°		
Speed		(min. 2°/sec. – max. 4,5°/sec.)		
Range of movement		Adjustment by electromechanical limit switch.		
Power supply		100÷240 V AC - 50÷60Hz 400mA		
Electric safety		Class II B Standard EN 60601-1		
Electromagnetic compatibility		Group 1 Class B, Standard EN 60601-1-2		
Classification according to EEC Directive 93/42		Class IIa		
Weight		47 Kg		
Dimensions		75 x 75 x 95 cm		

Wrist ulnar-radial deviation



Wrist flexion-extension

#### **Standard Accessory**



Accessories set included



02115 BATTERY CHARGER

## Continuous passive motion for elbow

#### XRIOO6 FISIOTEK LT-G

The Fisiotek LT-G is a mobilizer used for the passive rehabilitation of the elbow, by means of flexion-extension and pronosupination movements. The structure of the device provides great stability and precision of movement to ensure effective recovery. The programming of the range of movement is done electro-mechanically. The graphic scale on the central disc makes programming easy and intuitive. It is possible to adjust the height of the unit; the movement can be supervised by remote control with Start & Stop. Quality mechanical parts ensure the correctness of the movement over time.

#### Therapeutic Indications

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



	TECHNICAL FEATURES				
Clho	Flexion-extension	0° ÷ 150°			
Elbow	Pronation-supination	90° ÷ 0° ÷ 90°			
Speed		(min. 2°/sec. – max. 4,5°/sec.)			
Range of movement		90° ÷ 0° ÷ 90°.			
Power supply		100÷240 V AC - 50÷60Hz 400mA			
Electric safety		Class II B Standard EN 60601-1			
Electromagnetic compatibility		Group 1 Class B, Standard EN 60601-1-2			
Classification according to EEC Directive 93/42		Class IIa			
Weight		47 Kg			
Dimensions		75 x 75 x 103 cm			

Elbow prono-supination exercise



Elbow flexion-extension exercise

#### **Standard Accessory**



Accessories set included



02115 BATTERY CHARGER

## Continuous passive motion for shoulder

#### 01390 FISIOTEK LT

CPM device for left and right shoulder treatment, indicated whenever joint movement needs to be restored passively in both surgical or non-surgical pathologies. It allows rotation with patient sitting down or lying down and the possible movements carried out on the shoulder are: elevation in flexion, elevation in abduction, internal-external rotation. The device is easy to move and handle, suitable for home use. It consists of a base fitted on four swivel casters with brake and is height adjustable. Weight: 20Kg

#### Supplied with:

Arm support for performing the internal/external rotation movement

#### **Optional Accessories**

02115 BATTERY CHARGER

#### **Therapeutic Indications**

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



	TECHNIC	AL FEATURES
	Elevation during flexion	0° ÷ 180°
Shoulder	Adduction-abduction	complete physiological range
	Internal-external rotation	90°÷ 0 ÷ 90°
Speed		•
Range of movement		Adjustment by electromechanical limit switch
Power supply		100÷240 V AC - 50÷60Hz 400mA
Electric safety		Class II B Standard EN 60601-1
Electromagnetic compatibility		Group 1 Class B, Standard EN 60601-1-2
Classification according to EEC Directive 93/42		Class IIa



1. Elevation in flexion range: 0°÷ 180°



2. Elevation in abduction: complete range



3. Internal /external rotation range: 90°÷ 0°÷90°

## Continuous passive motion upper limbs

#### 08389 FISIOTEK HP2

CPM device allows to work on the three main joints of the upper limb: shoulder, elbow and wrist. It's stable and precise and it can be used both with the patient sitting or lying down. The device is provided with a memory card. The operational data for each patient is automatically stored on it. This makes instrument preparation easier and faster for following rehabilitation sessions. It's also available a function defined as "Warm-up", which has the purpose of warming up the treated joint through several movement cycles having a work angle less than the one reached during the previous session. Weight: 77 Kg.

#### **Optional Accessories**

#### 08391 WRIST-ELBOW KIT

Set of accessories for wrist and elbow rehabilitation. Can be used with model Fisiotek HP2 code 08389.

02115 BATTERY CHARGER

#### **Therapeutic Indications**

#### **Surgical Pathologies**

- · Arthroscopy for calcific tendinitis
- Acromyoplasty
- Long head of biceps enotomy + acromyoplasty
- Acromyoplasty + tenotomy of the supraspinal
- Arthroscopy for supraspinal injury + acromyoplasty
- · Surface operation for long head of biceps tenodesis and supraspinal repair
- Surface operation for long head of biceps + supraspinal reconstruction
- · Synovectomy, arthroscopic acromyoplasty

#### **Non-surgical Pathologies**

- · Brachial nerve injury
- Rotator cuff injury
- Humerus fracture
- Arthrosis
- Rotator cuff tendopathies
- · Contusive traumas of the rotator cuf
- · Fracture of the trochities
- Capsuloligamental hyperlaxity
- Calcific tendopathies
- Adhesive capsulities





		TECHNICAL FEATUR	RES		
		Elevation	5° ÷ 180°	seated - supine	
889	Chauldar	Adduction-abduction	35° ÷ 150°	seated	
Shoulder Shoulder		Internal-external rotation	30°÷ 0 ÷ 85° 90° ÷ 0 ÷ 25°	supine	
	Elbow	Flexo-extension	0 ÷ 150°	seated - supine	
391	CIDOM	Prone-supination	90° ÷ 0 ÷ 90°	seated - supine	
08391	Wrist	Flexo-extension	80° ÷ 0 ÷ 80°	seated - supine	
	WIISL	Ulnar-radial deviation	20° ÷ 0 ÷ 30°	seated - supine	
Speed in both directions		min. 1,5°/sec. max 3,5°/sec.			
Work tim	е		•		
Automati	c increase	of the amplitude of movement on both limits	•		
Pause in	both move	ement limits	•		
Warm-up	cycles		•		
Power supply			100÷240V - 50÷60 Hz		
Electric Safety		Class 1 B Standard EN 60601-1			
Electromagnetic compatibility		Group I Class B Standard EN 60601-1-2			
Classifica	ation accor	ding to EEC Directive 93/42	Class IIa		



Elevation of the shoulder with the patient in supine position



Elevation of the shoulder with the patient sitting down

## Continuous passive motion lower limbs



#### **Distinctive elements:**

- Fisiotek 3000 is intended for use in rehabilitation to restore joint movement in both surgically and nonsurgically 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.



Plantarflexion of the ankle using Fisiotek 3000 TS



Dorsiflexion of the ankle using Fisiotek 3000 TS

## Treated pathologies:

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



Flexion-extension movement of the hip with Fisiotek 3000 E

## Continuous passive motion lower limbs

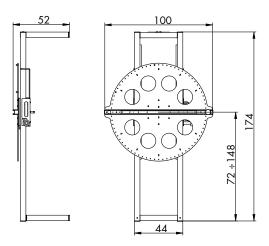
TECHNIC	TECHNICAL FEATURES					
CODES	XRI001	XRI002	XRI003	XRI004	XRI005	
MODELS	Fisiotek 3000 GS	Fisiotek 3000 G	Fisiotek 3000 E	Fisiotek 3000 TS	Fisiotek 3000 N	
Knee and hip mobilization	•	•	•	•	•	
Ankle mobilization				•		
Use of memory card	•			•		
Speed control (flexion/extension)	•	•		•		
Speed 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				$20^{\circ} \div 0^{\circ} \div 40^{\circ}$		
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 — REG	GULATIONS -	LOGISTICS				
CODE	XRI001	XRI002	XRI003	XRI004	XRI005	

DIRECTIVES – REGULATIONS - LOGISTICS						
CODE	XRI001	XRI002	XRI003	XRI004	XRI005	
Power supply		11	0 ÷ 230V - 50 ÷ 6	0Hz		
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
	<b>01840</b> 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°.				•	•
	O1841 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.	•	•	•	•	•
	<b>02099/02093 FLOATING KEYPAD</b> 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:  $174 \times 100 \times 52$  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.







Resistance control with 8 settings



Height adjustment 72+148 cm



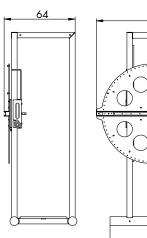
Range of motion level indicators

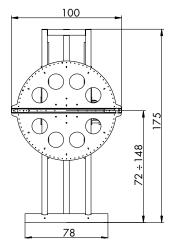


**AC0711 SET OF ACCESSORIES** Includes: 1 forearm support, 1 counterweight, 1 elbow rest, 1 front grip handle.

### 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.







#### $\Xi$



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".



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			•	•	•	
39	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	•		•		•	•

 $\textbf{Key} : \bullet \text{ GH} > \text{Glenouhumeral} \bullet \text{ST} > \text{Scapulothoracic} \bullet \text{ KC} > \text{Kinetic chain}$ 

### 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.

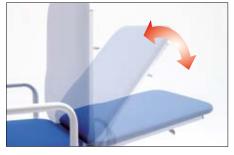




The extent of the movement and application point are adjustable independently.

Comfortable restrain support, height adjustable.

	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



Adjustable backrest, servo-assisted by gas spring.



Height adjustable load arm with reference scale.

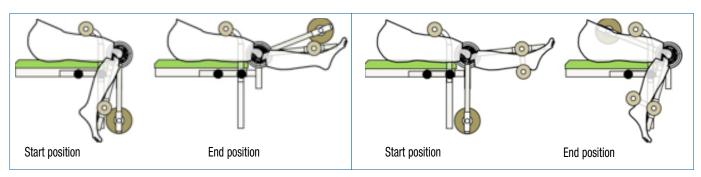


#### **INTENDED USE:**

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

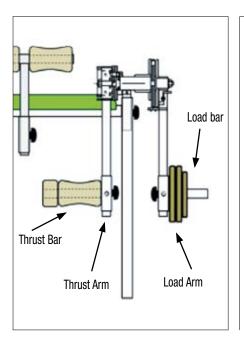


#### **LEG EXTENSION**

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.

## RehaBike Magnetic line



#### **XRU001**

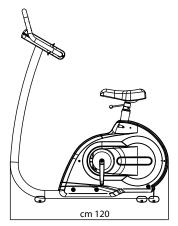
#### **VERTICAL MAGNETIC BIKE**

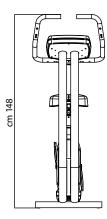
This machine is studied for medical or therapeutic purposes of rehabilitation. It can be used in gyms and sport centres as a valid instrument to improve the athletic preparation for fitness training and to control the user's cardiovascular functions. Built with high quality materials, it uses the most updated technologic resources granting high performances in total silence and reliability. The multifunctional console has manual programs. Supplied with heart rate monitoring via palm sensors.

#### **Console description**

- · Key Reset, to cancel all values;
- Key Sel, to set up the heartbeats, time and distance of exercise;
- Keys +/-, to change the heartbeats, time and distance values of exercise;
- The LCD graph display shows the heartbeats, RPM, time, distance and calories values.







CE

TECHNICAL FEATURES			
Dimensions	120 x 55 x 148 h cm		
Weight	80 kg		
Console	Liquid crystal display		
Resistance system	Magnetic		
Manually adjustable constant resistance	from 40 to 446 Watt		
Transport wheels	yes		
Transmission	Belt driven		
Power supply (console)	3 x 1.5V batteries		
Seat minimum height from ground	80 cm (90 cm with XRU007)		
Max user weight:	180 kg		



XRU006
PEDAL RADIUS
Continuously adjustable.



XRU007 HORIZONTAL SEAT ADJUSTMENT

## RehaBike Magnetic line



#### **XRU002**

#### HORIZONTAL MAGNETIC BIKE

This machine is studied for medical or therapeutic purposes of rehabilitation. It can be used in gyms and sport centres as a valid instrument to improve the athletic preparation for fitness training and to controlthe user's cardiovascular functions. Built with high quality materials, it uses the most updated technologic resources granting high performances in total silence and reliability. The multifunctional digital console has manual programs. Supplied with heart rate monitoring via palm sensors.

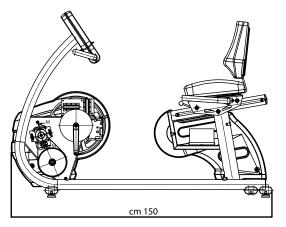
#### **Console description**

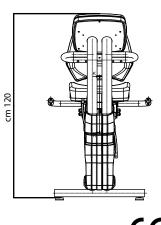
- · Key Reset, to cancel all values;
- Key Sel, to set up the heartbeats, time and distance of exercise;
- Keys +/-, to change the heartbeats, time and distance values of exercise;
- The LCD graph display shows the heartbeats, RPM, time, distance and calories values.



Seat adjustable in depth







CE

TECHNICAL FEATURES			
Dimensions	150 x 50 x 120 h cm		
Weight	100 kg		
Console	Liquid crystal display		
Resistance system	Magnetic		
Manually adjustable constant resistance	from 40 to 446 Watt		
Transport wheels	yes		
Transmission	Belt driven		
Power supply (console)	3 x 1.5V batteries		
Seat minimum height from ground	80 cm (90 cm with XRU007)		
Max user weight:	180 kg		



XRU006
PEDAL RADIUS
Continuously adjustable.



XRU008 LATERAL ARMRESTS

## RehaBike Ergometers Elite line



#### **XRU031**

#### **VERTICAL CYCLE ERGOMETER**

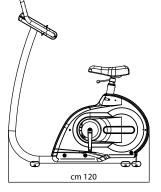
The machine is a valid instrument for physical rehabilitation in medical and therapeutic field as well as ergometer for stress test connected with ECG machine, preset for manual/automatic stand alone operation and ECG digital control with RS232 interface. The machine is made with high tech and quality materials allowing high performances in total silence and reliability. It is sold with cardio rate receiver for not diagnostic use but only for user's heart rate value calculation if dressing the chest belt and it has a multifunction touch screen digital console for seeing time (hh:mm:ss), distance (km), time to (km), calories (Kcal), Cardio (BpM), watt, RPM and speed (km/h). Supplied with dual heart rate monitoring via palm sensors and chest strap.

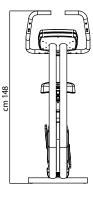
#### This machine can be used as follows:

- Manual use;
- Time (count-down);
- Distance (count-down);
- Calories (count down);
- · Cardio (constant heart beats);
- Fat burning (constant heart beats);
- 10 pre-set profiles;
- 100 free profiles;
- 4 preset tests 14 storable tests;
- · Personal user exercises are storable on USB memory;
- Tv / video;
- Radio / mp3;
- · Remote use by RS232.

TECHNICAL FEATURES				
Dimensions	120 x 55 x 148 h cm			
Weight	80 kg			
Console	Touchscreen 10"			
Adjustable constant resistance	from 0 to 600 Watt			
Workload increment	1 Watt			
Max speed	130 rpm			
Transport wheels	Yes			
Transmission	Belt driven			
Resistance system	Electronic			
Seat adjustment	Vertical, oil-pneumatic system			
Interface type	RS232 port			
Power supply	230 V AC - 50÷60Hz			
Seat minimum height from ground	80 cm (90 cm with XRU007)			
Max user weight	180 kg			







CE







XRU007 HORIZONTAL SEAT ADJUSTMENT

## RehaBike Ergometers Elite line



#### **XRU032**

#### HORIZONTAL CYCLE ERGOMETER

The machine is a valid instrument for physical rehabilitation in medical and therapeutic field as well as ergometer for stress test connected with ECG machine, preset for manual/automatic stand alone operation and ECG digital control with RS232 interface. The machine is made with high tech and quality materials allowing high performances in total silence and reliability. It is sold with cardio rate receiver for not diagnostic use but only for user's heart rate value calculation if dressing the chest belt and it has a multifunction touch screen digital console for seeing time (hh:mm:ss), distance (km), time to (km), calories (Kcal), Cardio (BpM), watt, RPM and speed (km/h). Supplied with dual heart rate monitoring via palm sensors and chest strap.



Seat adjustable in depth



TECHNICAL FEATURES				
Dimensions	150x50x120h cm			
Weight	100 kg			
Console	Touchscreen 10"			
Adjustable constant resistance	from 0 to 600 Watt			
Workload increment	1 Watt			
Max speed	130 rpm			
Transport wheels	Yes			
Transmission	Belt driven			
Resistance system	Electronic			
Worlkload adjustment	Electronic			
Interface type	RS232 port			
Seat adjustment	Adjustable in depth			
Power supply	230 V AC - 50÷60Hz			
Max user weight:	180 kg			

#### **Optional Accessories**

cm 150



XRU006
PEDAL RADIUS
Continuously adjustable.



XRU008 LATERAL ARMRESTS

## RehaBike Ergometers - Software Presentation



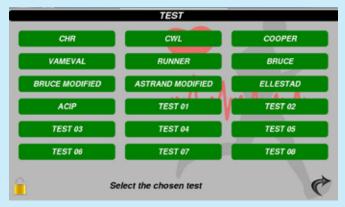
**Screenshot 1** 



**Screenshot 2** 



Screenshot 3



Screenshot 4

Our ergometer line has been designed to be used at health-care facilities and physiotherapy wards. They are powered by a main supply, and they have a console to set speed, tilt as well for displaying some features such as heartbeat, duration of the exercise and the distance covered. It is worth highlighting the manual function, which allows the carer to have freedom of setting the parameters mentioned before in order to customize the type of exercise.

#### **CARDIO / FAT BURNING**

It is necessary to set beforehand all the patient's data and the go on to set a kind of exercise in consideration of any of the following parameters, that is to say, time, distance, or calories. Once the patient's data have been set and the main work parameter has been chosen it is possible to set the warm up and cool down periods. (Screenshot 2 and 3)

#### **POSSIBLE TESTS**

There are 10 types of tests for the patient already pre-set, and they are especially practicle for measuring different stress tests in accordance with the objective to be reached. For example, the CHR test (Constant Heart Rate) and the CWL test (Constant Work Level), which allow to carry out a type of exercise at a constant heart rate. Another test called RUNNER allows to carry out an exercise with an increasing load increasing the speed at 1 km/h per minute rate. The COOPER test allows to carry out an exercise to assess the maximum distance covered in 12 minutes. Furthermore, it is possible to set the test conditions manually by the carer. The additional test conditions are 8, and the procedure is the same as for registering a free profile.

(Screenshot 4)

## RehaBike Ergometers - Software Presentation

#### **PROFILES**

There are 10 basic profiles available directly from the main menu. Furthermore, it is possible to set and memorize some exercises in a customized manual mode for a group or for single patients, since there are 100 free profiles. The saved profiled can be called out by using the arrows forward and backward and by choosing it on the touch-screen display. (Screenshot 5)

#### **GRAPHICS WHILE WORKING OUT**

All parameters are displayed while carrying out an exercise with the aid of a graphic representation which shows specifically speed and tilt with green and orange columns while the heartbeat is displayed with a red zig-zag line. Two other dotted lines show minimum and maximum rate of heart pulse set for the patient treated corresponding to his or her personal data. (Screenshot 6)

#### **SOME SPECIAL FUNCTIONS**

A group of icons can be always found while carrying out an exercise. They can be found in the upper-right part of the screen and they offer some specific functions, as for example, locking the work setting of the treadmill in manual version or with a given profile or test condition. Also for the call-out function of the patient's personal data, which must be registered before the beginning of any exercise, the TV function to watch multimedia channels via internet or to play videos from a USB support, and last the RADIO function to listen to channels or play music from a USB support. (Screenshot 7)



**Screenshot 5** 



**Screenshot 6** 



**Screenshot 7** 

The software is multilingual and the measure unit for the distance covered can be set either in miles or in kilometers. Remote control from a pc or ECG is done via an RS 232 cable included. Upon request, a pc software for a control of the walk can be provided.

## RehaBike Ergometers - Elite line

#### **XRU036**

#### **ARM ERGOMETER REHARUNNER 1**

Upper limbs ergometer with high stability and numerous adjustment options, which makes it suitable for a wide variety of users and training objectives. The seat is depth-adjustable and can be removed if exercises need to be performed from standing or in a wheelchair or on a different seat. The arm of the handles' fulcrum of rotation can be height adjusted from 78 to 128 cm, and the handles' length can also be adjusted. Provided with casters for any necessary transfer. Chest strap for heart rate monitoring included.

#### **XRU035**

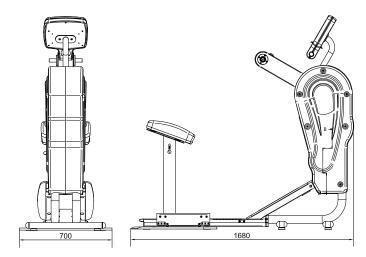
#### **ARM ERGOMETER REHARUNNER 2**

Wall-mounted ergometer which shares the same features as the "Arm ergometer Reharunner 1" cod. XRU036. Seat not included. The arm of the handles' fulcrum of rotation can be height adjusted from 78 to 128 cm, and the handles' length can also be adjusted. Chest strap for heart rate monitoring included.



#### **Console description**

- Touchscreen 10" display showing heart beat, calories, charts and key function;
- 10 pre-set exercise profiles;
- 100 free profiles with Watt and time setting for each step;
- 4 preset tests 14 storable tests;
- Personal user exercises are storable on USB memory;
- · Remote use by RS232;
- Decreasing workout programming for exercise duration, distance or calories to burn;
- Possibility of constant pulse rate training, with automatic workload adjustment.



TECHNICAL FEATURES			
Dimensions	70 x 168 x 160 h cm (XRU036) 70 x 75 x 160 h cm (XRU035)		
Weight	165 kg (XRU036) 130 kg (XRU035)		
Console	Touch screen 10"		
Adjustable constant resistance	From 0 to 600 Watt		
Transmission	Belt driven		
Resistance system	Electronic		
Workload increment	1 Watt		
Interface type	RS232 port		
Power supply	230 V AC - 50÷60Hz		
Max user weight (XRU036)	180 kg		



XRU028
SEAT WITH BACKREST
Seat with backrest for Reharunner 1
Ergometer (code XRU036).

## **EHABILITATION**

## **Exercise bikes** - Fitness line



**XGA002** BRX EASY EXERCISE BIKE BRX EASY is an exercise bike with basic functions that is recommended for daily exercise at home.

#### **Exercise computer:**

Displays 6 workout parameters: distance, time, calories, pulse, speed, pedometer.
Pulse reading: palm sensors. LCD display.

#### **Accessories included:**

Rapid seat height and depth adjustment. Easy access. Tilt adjustable handlebar. Pedals with foot straps. Casters.

#### **Technical details:**

Braking system: magnetic
Flywheel mass: 8 kg
Pedaled workout range: 1-8 (manual)
Product dimensions: 86 x 50 x 136 h
Power supply: 2 batteries (AA- 1.5 V)

User weight: 110 kg Category: EN 957-1/5 HC



#### 76294 CYCLETTE CYCLE M-LA

The exercise bike comes with a magnetic brake system with resistance settings in 8 steps, a 6 kg flywheel, hand pulse sensors integrated in the hand grips and an easy-to-use training computer with a continuous display for 6 functions.

#### **Training Computer**

Continuous display for: 6 functions, automatic variable display with on/off option; LCD display; Distance covered per session; Energy consumption; Pulse rate (POLAR compatible, 5 kHz, with integrated plug-in-receiver, accessories): Hand pulse sensors included / Ear clip and cardio pulse set; Recovery pulse rate with fitness mark; Step frequency; Target settings:; Target zone training (FAT / FIT / MANUAL); Upper pulse-rate limit: optical warning signal.

#### **Technical details:**

Brake system: Magnet Drive system: Ribbed belt Flywheel: approx. 6 kg Max. weight load: 110 kg Power supply: Batteries

Size when set up (L/W/H in cm): approx. 80x60x144

Workout control: rpm-dependent Workout range: 1-8 (manual)



#### 79867 CYCLETTE CYCLE R

Sitting exercise bike featuring an especially comfortable and safe sitting position, enables optimal training for everyone. The handlebar and the open frame facilitates getting on and off. The training computer with push-n-turn offers convenient operation of the exercise bike.

#### **Training Computer**

Continuous display for: 7 functions; Display / workout chart: Backlit LCD with workout chart; Distance covered per session; Energy consumption; Pulse rate (POLAR compatible, 5 kHz, with integrated plug-in-receiver, accessories): Hand pulse sensors included - chest belt optional; Pulse-controlled training programmes; Recovery pulse rate with fitness mark; Step frequency; Target settings; Target zone training (FAT / FIT / MANUAL); Total no. of programmes: 12; Upper pulse-rate limit: optical and acoustic warning signal; User memory: 4.

#### **Technical details:**

Brake system: Magnet (motor-controlled)

Drive system: Ribbed belt Flywheel: approx. 9 kg Max. weight load: 130 kg

Power supply: Power connection (230 volts)

Size when set up (L/W/H in cm): approx. 163x63x109

Workout control: rpm-dependent

Workout range: 1-16 (computer-controlled)

#### **ACCESSORIES**



Rubber mat to protect the floor and reduce noise while the gym machines are in use.

**79292** MAT cm 140x80 **79294** MAT cm 220x110



#### 79370 CARDIO-PULS-SET

### **Exercise bikes** - Fitness line



#### 76892 CYCLETTE GOLF C2

Manually-adjustable magnetic brake system with 8 resistance levels. Drive system with very good rotational characteristics (rotational index 7.9 – copper finished flywheel mass with 6 kg total weight). Reliable locking and tool-free adjustable seat attachment with high-end BASIC FOAM seat. Pulse measurement via hand pulse sensors. Tablet PC holder, gravity pedals (with straps), castors and floor levellers included. Easy access low step-in.

#### **Training computer:**

LCD display; Easy to operate training computer with a continuous display for 6 functions, target settings and recovery pulse rate with fitness mark.

#### **Technical details:**

Centrifugal mass: approx. 6 kg Gear ratio: 1:10

Power supply: batteries Max load: 130 kg

Dimensions: 119x55x137 h cm Magnetic Braking system DIN Class EN 957-1/5, HB



**08310** GYM PEDAL EXERCISER cm 37 x 40 x 30 h



#### 76894 CYCLETTE GOLF C4

Premium quality and easy to operate training computer with simple menu navigation. The currently achieved training performance is displayed. Motor-controlled adjustment of the magnetic brake system with 15 resistance levels. Drive system with very good rotational characteristics (rotational index 7.9 – copper finished flywheel mass with 6 kg total weight). Reliable locking and tool-free adjustable seat attachment with high-end BASIC FOAM seat. Pulse measurement via hand pulse sensors, optional chest belt use. Tablet PC holder, gravity pedals (with straps), castors and floor levellers included. Easy access low step-in.

#### **Training computer:**

LCD display; storage space for four users and one guest, display of current heart rate zone, 10 programmes and programme editor (incl. heart rate orientated programme) as well as 7 available languages (EN, DE, FR, IT, NL, PL, RU).

#### **Technical details:**

Centrifugal mass: approx. 6 kg

Gear ratio: 1:10

Power supply: mains power 230V

Max load: 130 kg

Dimensions: 119x55x137 h cm Magnetic Braking system DIN Class EN 957-1/5, HB

#### **ACCESSORIES**



Rubber mat to protect the floor and reduce noise while the gym machines are in use.

**79292** MAT cm 140x80 **79294** MAT cm 220x110



#### 79370 CARDIO-PULS-SET

## EHABILITATION

### **Ergometers** Fitness line



#### 76896 ERGO C6

Ergometer with 2 user modes: AUTO Mode (rpm-independent) and MANUAL Mode (rpm-dependent): the user selects a brake level ("a gear"), which remains set independent of the step frequency. Induction brake system with 250 W top performance in AUTO mode. Drive system with rotational index 7.9 – copper finished flywheel mass with 6 kg total weight. Reliable locking and tool-free adjustable seat attachment with high-end BASIC FOAM seat. Pulse measurement via hand pulse sensors, optional chest belt use. Tablet PC holder, gravity pedals (with straps), castors and floor levellers included. Cycled value displayed in watts. Easy access low step-in.

#### **Exercise computer:**

Premium quality LCD display, storage space for four users and one guest, display of current heart rate zone, 10 programmes and programme editor as well as 7 available languages (EN, DE, FR, IT, NL, PL, RU).

#### **Technical details:**

Centrifugal weight: 6 kg Gear ratio: 1:10

Power supply: mains power 230V Dimensions: 119x55x137 h cm

Resistance range AUTO mode: 25-250 W (5W steps) Resistance range MANUAL mode: 20 brake levels

Maximum load: 130 kg DIN Class EN 957-1/5, HA



#### 76898 ERGO C8

Ergometer with same characteristics as ERGO C6 - code 76896, designed for users with a body weight above 110 kg (max. 150 kg) and higher performance induction brake system (max. 400W - rotational index 8.8). Flywheel mass with 8 kg total weight.

The display shows the currently cycled value in watts. Easy access low step-in

#### **Exercise computer:**

Premium quality LCD display, storage space for four users and one guest, display of current heart rate zone, 10 programmes and programme editor as well as 7 available languages (EN, DE, FR, IT, NL, PL, RU).

#### **Technical details:**

Centrifugal weight: 8 kg Gear ratio: 1:10

Power supply: mains power 230V Dimensions: 119x55x137 h cm

Resistance range AUTO mode: 25-400 W (5W steps) Resistance range MANUAL mode: 20 brake levels

Maximum load: 150 kg DIN Class EN 957-1/5, HA

#### **ACCESSORIES**



Rubber mat to protect the floor and reduce noise while the gym machines are in use.

**79292** MAT cm 140x80 **79294** MAT cm 220x110



#### 79370 CARDIO-PULS-SET

### **Ergometers** Fitness line



#### 76899 ERGO C12

Ergometer with 2 user modes: AUTO Mode (rpm-independent) and MANUAL Mode (rpm-dependent) the user selects a brake level ("a gear"), which remains set independent of the step frequency. Excellent programme variety: Personal training coach with IPN System, HIT Training, Challenge Training, heart rate orientated training as well as endless configuration possibilities in the programme editor. Large, comfortable and ergonomic multi-position handlebars with luxurious artificial leather cover. Induction brake system with 400 W top performance in AUTO mode. Drive system with excellent running characteristics (rotational index 9.0 – flywheel mass with 10 kg total weight). Reliable locking and tool-free adjustable seat attachment with high-end 3D GEL seat. Pulse measurement via hand pulse sensors or the supplied chest belt. Tablet PC holder, gravity pedals (with straps), castors and floor levellers included. The display shows the currently cycled value in watts. Easy access low step-in.

#### **Exercise computer:**

Very high-quality and easy to use training computer with colour display. Including Bluetooth interface, simple menu navigation, storage space for four users and one guest, colour coded display of current heart rate zones as well as 7 available languages (EN, DE, FR, IT, NL, PL, RU).

#### **Technical details:**

Centrifugal weight: 10 kg

Gear ratio: 1:10

Power supply: mains power 230V Dimensions: 119x55x137 h cm

Resistance range AUTO mode: 25-400 W (5W steps) Resistance range MANUAL mode: 20 brake levels

Maximum load: 150 kg DIN Class EN 957-1/5, HA



#### 76882 ERGO RE7

Horizontal ergometer providing excellent comfort during exercise, especially for those who suffer from back problems. Easy access. Backlit exercise computer with 48 programs and storage of 4 individual profiles. Backrest upholstered with breathable material. The seat can be adjusted horizontally and vertically. Control panel with adjustable tilt angle. Induction braking system working independently from the number of revolutions. Polar cardio strap included.

#### **Exercise computer:**

LCD Display Resting
pulse monitoring and fitness score
48 workout programs
Targeted area workout
Integrated IPN test
Cool down function 5 HRC programs
20 individual programs
Body mass index
Storable user profiles: 4+guest USB interface
Manual load adjustment

#### **Technical details:**

Induction brake

Centrifugal weight: 10 kg Power supply: mains power 230V Dimensions: 171 x 56 x 123 cm Resistance range: 25-400 W

Gear ratio: 1:7.7 Max load: 150 kg; DIN Class EN 957-1/5, HA

#### **ACCESSORIES**



Rubber mat to protect the floor and reduce noise while the gym machines are in use.

**79292** MAT cm 140x80 **79294** MAT cm 220x110



#### 79370 CARDIO-PULS-SET

## PHABILITATION

## Rowing machines and steppers Fitness line

#### **ROWING MACHINES**



#### **79779** KADETT

This rowing machine allows a circular rowing motion that comes remarkably close to real rowing in the water. Adjustable resistance and footrests, folding bars. Maximum load 130 kg Dimensions 150 x 170 x 46 h cm.

#### **ACCESSORY**

79370 CARDIO-PULS-SET





#### **79741** COACH M

Rowing machine with linear rowing motion system. Sliding seat on low-noise rails. Exercise computer with 6 functions.

Magnetic braking system. Chest strap included.

Magnetic braking system. Chest strap included. Maximum load 130 kg

Dimensions 206x52x67 h cm.









#### **ACCESSORIES**



Rubber mat to protect the floor and reduce noise while the gym machines are in use.

**79292** MAT cm 140x80 **79294** MAT cm 220x110



#### 79370 CARDIO-PULS-SET

Balancing and rocking boards are used for further reinforcement of the ability to control pelvic movements and the spinal chord.



The first exercise to be performed on the rocking board is the grounding exercise to acquire stability. Once the perfect balance position is reached, a rocking action is performed, from left to right with rhythmic, regular and alternate movements. These movements favor a reset of the muscle reactions as well as the agonist and antagonist balance of each side of the body, right and left. (Cristofanilli, 1994).



**07755 BALANCE BOARD**For foot prono-supination exercises.
Resistance to medial and lateral pressure is applied by the spring.
Dimensions 34 x 17 x 8h cm.





The rocking movements are performed also with spread lower limbs in reference to the sagittal plane: the weight of the body is transferred from one foot to the other, alternating the position each time the patient feels any stress on the lower limbs.

After the patient has rotated the body of 90°, the aim is a good stability by performing a grounding exercise. Then, keeping both feet at the same height, the patient begins to rock forward and backwards, alternately, rhythmically and in a regular way. In this way, the movements favor the agonist and antagonist balance of the front and hind muscles in the body. The instructor watches closely the patient at the sagittal level and may the trunk be bent forward, he would advice to work about the unbalancing of the body backwards, while, may the body be bent backwards he would advice to work about the unbalancing of the body forward, to find the right balance of posture.



Last, the proprioceptive work is intensified on one foot only, both on the front and hind planes, as well as in the sagittal plane.



**07735** ACCELERATOR
For ankle and foot exercise.
The urethane wedge provides the desired pressure-resistance.
Dimensions 34 x 17 x 18 h cm.



Then, the patient may pass on to the balancing board Bobath which is even more unstable in comparison with the balance board: the same progressive movements can be repeated and further exercises to favor balance of planes can be performed at the same time. **02650** BALANCING BOARD BOBATH P

Padded top, synthetic leather covering.

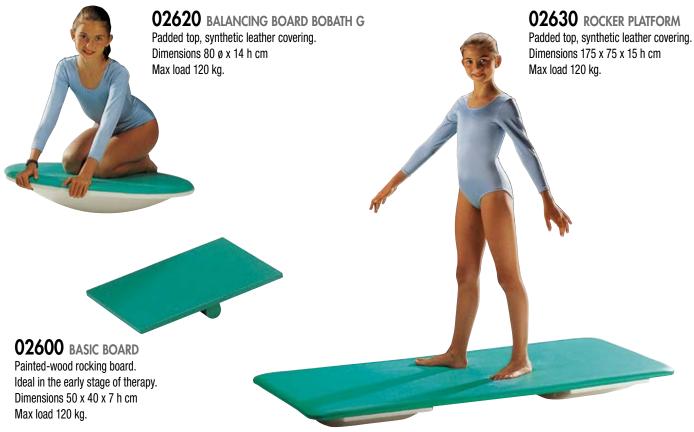
#### Dimensions 50 ø x 10 h cm Max load 120 kg

- Directions for performing exercises on rocking and balancing boards

   At the begining it is advisable to place the device in front of the wall bars. That
- mirror;;
  Exercises are performed with your eyes open. Little by little, after you have more ability, difficulty of the exercises can be increased by keeping your eyes

way getting on and off the device is easier and perform the exercises safely. Once you have more ability you can perform the exercises in front of the

- Another way to increase the difficulty of the exercises is by increasing the speed of the movements, diminish the contact surface as by lifting yourself on the tip of your feet;
- The trainer may increase the difficulty of the exercises by pushing the patient or the device. In this way a rhythmic balance of the posture is performed and the trainer can control the reactions of the patient and check on the progress.



















O1842 PEDOBALL

This small wobble board with a hemispheric bottom allows patients to perform various exercises both sitting and standing; it stimulates balance, stability on one leg and motor coordination. 5 balls are supplied as standard to gradually increase the level of difficulty of the exercises.

Dimensions: Ø 47 x 27 h cm.

Max load: 120 kg.



O1844 THERAPY TOP
Therapeutic wobble board, ideal
for exercising balance, coordination
and responsiveness. The surface is
structured in such a way as to provide
further sensory stimulation.
Dimensions: Ø 40 x 9 h cm.
Max load: 120 kg.

O1845 BALANCE
Therapeutic wobble board
developed by Prof. Bielefeld at the
University of Flensburg to exercise
coordination and stability of
movement, balance, psychomotor
skills, concentration and
responsiveness in a varied and
effective way. Supplied with three
interchangeable exercise programs
and two pairs of hand straps.
Dimensions: 54 x 40 x 10 h cm.
Max load: 120 kg.

## REHABILITATION

## Proprioceptive boards





#### **01847** GYM TOP

Professional therapeutic program, designed to treat coordination, balance and muscle function disorders. The 13 exercises and 2 games suggested by the software allow choosing different difficulty levels and duration times, and are based on a new concept of psychomotor training. To train properly, the user must generate position changes on the balance board actively and consciously rather than merely react to them. In this way, the quality of the therapy is enhanced, since tactile, optical and acoustical analyzers are stimulated along with the main proprioceptors. The main data related to quality and quantity of the exercises can be measured, viewed, saved and analysed statistically, which makes this instrument ideal for therapists, suitable for use in sports and school, in physiotherapy and rehabilitation, ergotherapy, orthopaedocs, neurology and psychosomatics. It is also possible to exercise the hand, using a mouse or a joystick instead of the balance board. Simple to install and connect to the PC through USB port. Dimensions 40 x 10 h cm. Max load 120 kg.





#### 01846 WIPPRACER

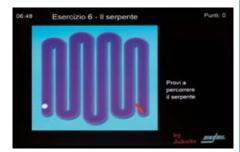
Keep your balance on the balance board while shifting your weight to drive your car in the traffic of the amusing game! The Wipracer is an innovative instrument, based on a new concept of phychomotor training: through play, patients will become strongly motivated to exercise. To continue the program, the user must generate position changes on the board actively and consciously rather than merely react to them. 10 types of programs, each one with different levels of difficulty, duration and sensitivity, make sure that the exercise is varied and the engagement is ever increasing, aimed at stimaulating both the main motor proprioceptors and tactile, optical and acoustical analyzers. It is possible to exercise the hand, using a mouse or a joystick instead of the balance board.

This instrument is perfect for use in sports and at school, in physiotherapy, ergotherapy, orthopaedics and rehabilitation, as well as for leisure activities. Simple to install and connect to a PC through USB port. Dimensions  $52 \times 13 \times 10 \text{ h cm}$ . Max load 120 kg.

#### **GYM TOP POSSIBLE PATHS**









#### 01869

#### LEONARDO MODULAR BOARD

This aid can be used in a rehabilitation program to gradually restore proprioception through various exercises. The board can be attached to clasps, hemi-spheres or bearing spheres through a series of holes and magnetized pins, which makes it possible to use it for a variety of exercises.



#### **BEARING SPHERES**

The magnetized spheres located under the board reduce a great deal of friction, making it easier for the patient to selectively recruit the muscles engaged. This makes it particularly useful in the first stages of recovery.



O1314
LEONARDO GUIDE
Manual containing a
sequence of exercises,
showing the many
possibilities for using
the system.



## **01294.DVD VIDEO LEONARDO**This dvd contains instructions for using the Leonardo modular system.

Follow us on You Tibe



## REHABILITATIO

## Proprioceptive boards



#### **CLASPS**

- The board highlights any asymmetries in the load distribution within the support base. The patient is assisted in gathering the information necessary to gain awareness and modify posture.
- This exercise requires that the various clasp tilts (pivoted with only one pin connected to the centre of the board) are recognized, while moving the ankle along the antero-posterior axis. Fitting pressure springs on the underside of the board will reduce the level of difficulty of the task.
- By changing the clasp position (pivoted with only one pin at the back) the action affects the mediolateral direction, thus conditioning the weight transfer to the inner or outer part through continual balancing. The metal pointer extends the clasp and highlights its direction.







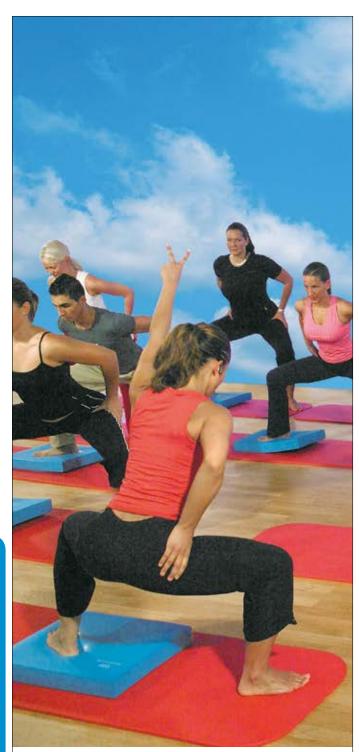
#### **LASER**

- The laser connected to the board magnifies the ankle movements also providing a visual feedback. When using the clasps the patient works on a single axis of rotation while the hemispheres enable the rotation exercises.
- 2. This is a useful exercise for teaching suitable techniques to go from a sitting position to standing. The patient learns not to lean on a fixed support, but is asked to reach various positions using the board while keeping the laser spot on the identified target, returning the trunk to a correct strategy.





## Other proprioceptive devices



AIREX



Training with the AIREX® Balance range of products offers you an efficacious and complete resource for the workout, focused on the different sectors in which they can be applied. Along with the balancing posture, strength and flexibility, great attention is paid to health care, prevention and psychophysical wellbeing in general.

The unique, closed-cell foam in these mats is supportive on the one hand, and warm, soft and cushioning on the other, allowing joints, tendons and muscles to trained in an extremely gentle yet effective manner. All areas of proprioception, sensorimotor function and co-ordination can be improved using the Airex Balance-pads, with the secret of the program being the softness of the equipment.



This Balance pad has lateral supports made of non-slip foam rubber, warm and comfortable to the touch. Suitable for use in exercise therapy and sports therapy. Dimensions:  $50 \times 41 \times 6 \text{ h cm}$ . Color: blue. Weight: 0.7 kg.



This Balance Pad "Elite" has lateral supports, a new surface that offers a pleasant massage and stimulation of the receptors in the sole of the feet. It actively promotes blood circulation in the feet and helps their well being. Use: mobility, stability, balance training and exercise in the water. Dimensions: 50 x 41 x 6 h cm.

Weight: 0,7 kg.

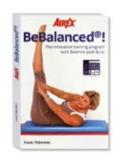


3

#### 10995 BALANCE BEAM

Dimensions: 160 x 24 x 6 h cm. Color: blue. Weight: 0,9 kg.

#### 02078 AIREX "BE BALANCED!" - BOOK



Bebalanced! – The innovative training program with Balance-pads & co. The book uses clear, simple language to explain the relationship between balance, co-ordination, and importance for health, posture and sporting activities. A wide variety of target groups can improve their skills through the different exercise modules. Over 200 illustrations - Frank Thommes English language.

## REHABILITATION

## Other proprioceptive devices



#### 03218 MOVIN'STEP

It is an innovative product that can be used in workouts, therapy and rehabilitation.

It combines two exercise tools: an Air-Step for cardio-vascular and strengthening exercises; plus a dynamic base for exercises that improve balance and co-ordination. A special valve allows switching from one use to the other. Available only in Purple. Dimensions: 35 x 35 cm.

independent





exchange



The Core Balance is an inflatable, elastic, highly resistant PVC half-sphere with a diameter of 40 cm, which can be set on a rigid base. It can be easily inflated by any pump by removing the plug on the edge.lt can be used for several kinds of training, both in the "medical rehabilitation", field for post-traumatic rehabilitation, especially concerning knees and ankles, and in the fitness branch. Thanks to its rounded shape and its variable elasticity (it can be inflated according to individual needs) it allows to work on static and dynamic balance, on strength and muscle toning as well as on spinal stabilization.Postural gymnastic training can be done with it. On the Core Balance you can do many exercises of coordination, stretching, flexibility as well as flexions, little jumps, dashes, didactic and pre-sport games. This tool absorbs the foot impact and does not stress the limbs, by reducing the micro-traumas. For such characteristic it is also used as an alternative to the step. Dimensions  $\emptyset$  40 x 25 h cm.



#### XCP001 WAFF MINI

Ergonomic cushion contoured around the body that brings recognized benefits in medical and sport environments. Develop and improve your reflexes, at any age. Whatever your exercise, support is essential for good balance. The Waff cushion is intended to promote values such as wellbeing, relaxation, and caring for your body. Dimensions: Ø 36 x 8 h cm. Weight: 0.3 kg.





## Rep bands and weights





#### **REP BAND AND REP CORD**

Elastic therapy bands and tubes for rehabilitation exercises, latex and odor free. Five resistance levels marked by different colors. Available in two lengths (see table).

Kit containing 3 Rep Bands x 1.4 m each with increasing resistance, to perform progressively harder exercises.

#### 31060

REP BAND KIT - EASY LEVE Levels 1, 2, 3.

#### 31070

**REP BAND KIT - MEDIUM LEVEL** Levels 2, 3, 4.

#### 31080

REP BAND KIT - HARD LEVEL Levels 3, 4, 5.



31550 REP BAND DISPENSER (container only).



#### **REP PUTTY**

An anti-microbial, non-toxic, non oily and no odor putty for hand rehabilitation. Available in five different color-coded strengths (see table).

REP PUTTY			
	CODE	COLOR	LEVEL
	31430	peach	extra soft
	31440	orange	soft
	31450	green	medium
	31460	blue	firm
	31470	purple	extra firm

#### **EGGSERCIZER**

Ergonomic rehabilitator for hands, wrists and fingers. Available in three different color-coded strengths (see table).

EGGSERCIZER			
	CODE	COLOR	LEVEL
	31501	peach	soft
	31511	green	medium
	31520	blue	firm
	31521	purple	extra firm







#### 01828

#### THERA FREEBALLS HAND

Dimensions 4 cm diameter – yellow; 5.5 cm diameter – red. Exercise guide included.











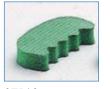




## Rep bands and weights

Used for a few minutes every day, the wrist and ankle weights keep the arms and legs toned. Wear them before starting your usual exercise or while doing your domestic chores: they will help you find your best shape again. Each exercise has to be repeated several times and gradually increased over time.





**07160** RUBBER HAND EXERCISER



07170 HAND GRIP



07230 SPRING DUMB-BELL



07240 5-SPRING STRETCHER



### Positional biofeedback



#### 01870

#### LEONARDO POSITIONAL FEEDBACK

These positional feedback systems are especially useful as assessment and rehabilitation tools. They make it possible to monitor and amplify movements (of the head, trunk, pelvis and knee) in order to provide a quick assessment of asymmetries, compensations and changes in patient performance. Once the problem has been identified, it is possible to target the action on the chosen body segment, guiding the patient towards the acquisition of new strategies.



#### **LASER POINTER**

The antenna and laser pointer make it possible to visualize the pelvis and trunk behavior on various planes, and to design position recognition exercises within tasks involving transfers of loads. The laser pointer can be used on head, trunk, pelvis and limbs thanks to its elastic Velcro fastenings.



#### **INCLINOMETER**

This provides accurate information when the predefined angle is exceeded. You can vary the difficulty of the task and reduce or increase the desired range of movement by changing the instrument tilt. In this case, the patient is asked not to increase their dorsal kyphosis so as not to activate the acoustic feedback. By positioning the inclinometer on the pelvis as shown, we can check for any undesired movements such as lifting the right hemipelvis or Trendelemburg positions on the left. It is useful for checking any possible compensation or lack of stabilization in the trunk during muscle strengthening exercises, which makes the exercises more accurate and more effective as a result.

# **REHABILITATION**

### Positional biofeedback





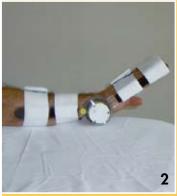
#### GONIOMETER

This aid allows the control of movements between two segments. Thus, it is very easy to set the range of joint motion beyond which an error signal is activated (negative FB) or to indicate the successful completion of the task (positive FB). When lacking scapulothoracic stability during abduction of the upper limb the goniometer activates the vibratory feedback on the muscle that should be recruited. The device can be used both with the goniometer and the inclinometer.

In the proposed exercise, the aid gives a signal in case of hyperextension, otherwise the patient may be asked to complete the knee extension.

An effective method to affect the gait length and symmetry is to apply a goniometer to the ankles, using special supports.











#### GONIOMETRIC BIOFEEDBACK

A goniometric biofeedback device is a signal transducer for joint angles during voluntary movement and range of motion adjustment. It can replace the electromyographic biofeedback, when it is impossible or hard to monitor or isolate a muscle. The international literature has shown studies on the effectiveness of the goniometric biofeedback in controlling the knee hyperextension of hemiplegic patients, in postural head control training and joint recovery of the elbow (fig. 1), wrist (fig. 2), foot (fig. 3) and knee (fig. 4). The device is lightweight (500 kg), easy-to-use, does not require a potentiometer or electronic box. It comprises two plastic (Plexiglas), mutually linked, revolving arms. One arm has a magnet, the other has a handle with a magnetic detector that can trigger a sound alarm. The angle position to be detected by an acoustic signal is determined by the handle, by means of the magnetic detector. This is always activated when it overlaps the magnet on the other arm. The goniometric device's arms are attached to the body segments with elastic Velcro straps, and they must be placed sideways to the mechanical axes of these segments. The device rotation centre matches the joint rotation centre.

## 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**

- 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.
- 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.

# REHABILITATION

## Neurocognitive Rehabilitation













#### **EXAMPLES OF APPLICATIONS**

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

## Neurocognitive Rehabilitation



#### 01084

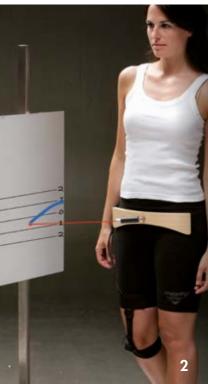
#### **MULTIFUNCTION TABLE**

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**

- 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.
- 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.