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Hoisting systems

Hygiene solutions

Lifting armchairs

Patient transport

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Chinesport thanks all those who contribute to the development of the contents of this document.





UNI EN ISO 9001:2015 UNI EN ISO 13485:2016

Tractions



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Tractions Presentation

Passive traction systems represent a tradition in our wide range of physiotherapy and rehabilitation equipment.

The electronic traction unit called EUROTRAK™ can therefore be combined with a height-adjustable or fixed-height traction table, supplied with specific belts for lumbar or cervical traction, positioning cushions and anchoring elements.





LUMBAR TRACTION









CERVICAL TRACTION







Tractions Eurotrak™ electronic unit



09337 EUROTRAK

EUROTRAK traction is an innovative device made following the most sophisticated and actual technological solutions. Thanks to the large liquid crystal display (LCD) showing all functions and function keys these units can be easily and friendly used. The EUROTRAK Series Units have a microprocessor control which allows them to have important peculiarities, such as flexibility and performance, not shared by the common traction appliances available on the market. The unit can be used to carry out both lumbar and cervical traction; in that last case the top available force has been limited at 20kg and the switching cervical/lumbar is not allowed in casual way. Furthermore the unit can work in static, dynamic and intermittent dynamic modes. The operator has the possibility to enter customized memories with personalized codes, for instance alphanumeric codes i.e. the name of patient or disease. Each programming operation is made up of three different types of treatment which will be delivered in sequence. Moreover, the operator can also use a large number of pre-set treatments, already largely used in many physical therapy centers.





















A switch that allows you to use the traction mode cervical or lumbar is placed on the side of the device



A special remote control for stopping the treatment is held by the patient for the whole period.



The display shows all parameters set, and any parameter value may be modified extremely easily and quickly if required.

AL DATA
110-240V, 50/60 Hz
80 VA
90 kg (Lumbar), 20 kg (Cervical)
1 kg (Lumbar), 1 kg (Cervical)
0.1 kg
95 cm
640x480
1000 hours at least
I-BF
II A
41 x 44 x 18 h cm
15 kg

STANDARD ACCESSORI	ES
	Q.TY
Power cable (UK + EU)	2
Emergency stop button	1
Pack of screw	1

OPTIONAL ACCESSORIES

XW001.W? BETATRAC E XW002.W? BETATRAC H 09324 ALFATRAC

WORKING MODE

Static

In static mode the unit delivers a steady force, equal to the set value for the whole period of the treatment. At the end of the treatment time the unit stops traction force and an intermittent sound is delivered.

In order to stop the therapy before the end of the time or to stop the end sound, the therapist has to press the STOP key.

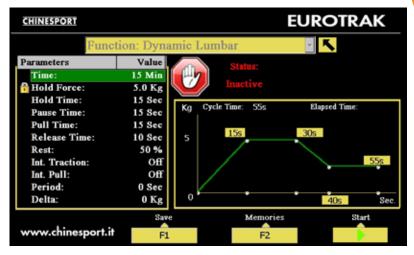
Dynamic

In dynamic mode there are four phases as shown in the diagram while the table gives the parameters for each phase. The therapist has always to pay attention to the patient's feeling when the traction force is increasing.

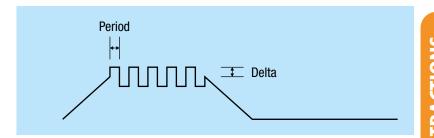
Moreover it's important not to carry out lumbar treatment programs for cervical treatment. In lumbar mode the top force value is not bounded at 20 kg, but it can get 90 kg.

Intermittent working

When the unit works in dynamic mode, for instance, with reference to the hold phase, the following diagram gives a description of the intermittent working. The Delta is the variation of the set force for each Period. The set Delta and Period values are good for all the phases set ON.



Phase	Description
Phase 1: hold	Hold time Hold force
Phase 2: pause	Pause time Rest: percentage of the traction force one wants it is delivered during the pause time
Phase 3: pull	Pull time: time to go from the set pause value to the set hold value
Phase 4: release	Release time: time to go from the set hold value to the set pause value

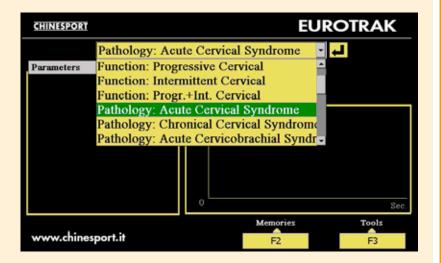


How to use the standard pathologies

To select the pathology you need to rotate the knob and then press ENTER to confirm.

The following screen will show all the steps related to the selected pathology, and pressing the ENTER key, you will get in the parameters screen.

In the user manual are also described all available protocols as stored in the internal memory for cervical and lumbar pathologies.



Tractions BETATRAC traction table



30° ÷ +80°

Electric height adjustment traction table, with four sections, electric height adjustment by foot pedal. Lumbar and cervical tractions can be applied. The table is supplied with an additional removable support frame to be fitted to EUROTRAK traction unit - code 09337. The head and leg sections can be easily adjusted via gas strut. The breathing hole plug comes as standard. Tractions are performed using two chromed attachment elements to be fitted to the head section, two more padded supports to be used in the underarm area and a height-adjustable spreader bar to support the traction rope, all included. For lumbar tractions, there is a sliding section underneath that reduces rubbing between patient and couch surface. The table is also provided with belts in various sizes to perform tractions involving the cervical, pelvic and thoracic area, as well as with a few cushions so the patient can be comfortably positioned and a correct longitudinal traction of the spine is achieved. The table has four swiveling wheels with central locking system, and the base frame is height-adjustable thanks to four independent feet that allow for accommodating any unevenness in the floor.

XW002.W? BETATRAC H

Traction table with the the same features as the XW001 table. The only difference is that the frame's height adjustment system is hydraulic.

	TECHNICAL DA	ATA
Height adjustment type	Betatrac E	Electric
	Betatrac H	Hydraulic
Height adjustment		46 ÷ 96 cm
Power supply	Betatrac E	230V - 50/60 Hz
	Betatrac H	-
Head/leg section adjustment		Gas spring
Head/leg section tilt		$-30^{\circ} \div 80^{\circ}$ / $0^{\circ} \div 80^{\circ}$
Casters braking system		Central by foot pedal
Safe working load		175 kg
Dimensions		196 x 64 x 46 ÷ 96 h cm
93/42/EEC Class		1

STANDARD ACCESS	ORIES
	Q.TY
Medium thoracic belt	1
Large thoracic belt	1
Medium pelvic belt	1
Large pelivc belt	1
Chin belt	1
Semi-cilindrical cushion	1
Wedge cushion	1
Trapezium cushion	1
OPTIONAL ACCESS	ORIES
09337 EUROTRAK	

? CHOICE OF UPHOLSTERY COLOR - Please always specify the	upholstery code along with the chosen item when this option is available.
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Lumbar traction application





Manual treatment applications



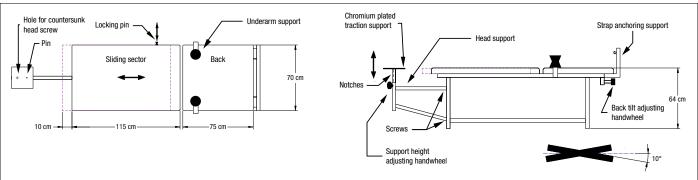


Note

The postural cushions included in the standard supply come in the same color as the table upholstery, unless otherwise specified.

Tractions ALFATRAC traction table





09324 ALFATRAC

Fixed height table specifically designed for tractions, with two sections and fixed height. The construction is made from coated metal with high density padding and synthetic leather upholstery. Both lumbar and cervical tractions can be applied. The table is supplied with a specific support frame to be fitted to the EUROTRAK traction unit - code 09337 or other electronic device. The support plate is height-adjustable. The table has a chromed mini-frame with anchoring hooks fitted to the head section, two more padded supports for the underarm area and a height-adjustable spreader bar for the traction rope. For lumbar tractions, there is a sliding section underneath that reduces rubbing between patient and table surface. This section can also be tilted laterally by hand up to a 10° angle, so the trunk can be rotated during traction. The supply includes a series of belts in various sizes for application to the cervical, pelvic and thoracic area, and some cushions so the patient can be comfortably positioned and a correct longitudinal traction of the spine is achieved.

TECHNICAL DATA						
Head/trunk section	Sliding on tracks					
Head section lateral tilt	10°					
Eurotrak traction unit support	Height-adjustable					
Safe working load	135 kg					
Dimensions	190 x 70 x 64 h cm					
Medical device class	I					



Head and trunk section, 10° side rotation







Note

The postural cushions included in the standard supply come in the same color as the table upholstery, unless otherwise specified.



STANDARD ACCESSORIES

	Q.TY
Medium thoracic belt	1
Large thoracic belt	1
Medium pelvic belt	1
Large pelivc belt	1
Chin belt	1
Semi-cilindrical cushion	1
Wedge cushion	1
Trapezium cushion	1

OPTIONAL ACCESSORIES

09337 EUROTRAK

Tractions Traction belts

The belts for passive tractions are available to be supplied individually or in set, and they are also in different sizes. They are designed for pelvic, thoracic or cervical application.

Each belt is complemented by straps to suit the patient, and for anchoring to the necessary points before performing passive tractions. In particular, the materials have passed resistance and elongation tests. The belts are also waterproof and can be easily sanitized. Their washing at high temperatures is possible. They are class 1 fire reaction.

Thoracic belts



The thoracic traction belt consists of two rectangular elements externally in leather, joined with a strap for application adherent to the patient. This belt is applied to stabilize the patient's upper part during lumbar tractions. It is then applied to anchor points above the patient's head present at one end of the traction table. The thoracic traction belt is available in two sizes.

09370 THORACIC BELT MBelt length: 120 cm
Circumference: 60 - 100 cm

09380 THORACIC BELT LBelt length: 150 cm
Circumference: 70 - 130 cm







Pelvic belts



The pelvic traction belt has the same characteristics as the thoracic belt in terms of choice of materials, type of workmanship, and fastening system. In particular, it consists of two main trapezoidal elements for application adherent to the patient. The pelvic belt then has straps, which are applied to the opposite side of a chromed bar, prepared with attachment points and also connection to the traction cord of the electronic unit. The pelvic traction belt is available in two sizes.

09350 PELVIC BELT MBelt length: 120 cm
Circumference: 60 - 100 cm

09360 PELVIC BELT LBelt length: 150 cm
Circumference: 70 - 130 cm







Cervical belt



AC1106 CHIN BELT

The chin belt for cervical traction consists of two main parts for application and support at the base of the head and front side. The elements are, externally in leather and soft on the inside, and connected to each other to contain and wrap during a consequent passive cervical traction of the patient. When the assembly and application to the patient are completed, the chin belt is hooked to a metal balance supplied as standard, which in turn is designed for a connection to the traction cord. Dimensions: 70 x 7 cm (stretched).









AC0079 SET OF TRACTION BELTS

The Chinesport traction straps are the result of the combination of two types of material: the external material is more rigid with an imitation leather covering, while the internal part is soft, with padding and upholstery in polyurethane coated fabric. They have therefore been designed to maintain a good patient application during the therapy session, and the related materials have been subjected to various technical tests.

The set includes five pieces: 2 Pelvic Belt (M / L), 2 Thoracic Belt (M / L), 1 Chin Belt.



Tractions Positioning cushions



We offer a set of cushions that can help create the conditions for greater relaxation and comfort for the patient before and during passive tractions at the lumbar or cervical level. The cushions are high-density support for the patient's head or lower limbs.

Trapezoid cushion



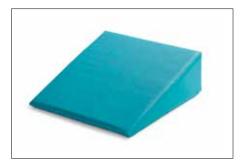
It is of such shape and size as to support the patient's lower limbs in a raised position, to ensure a minimum load on the vertebral level. A preliminary condition of greater relaxation is therefore created and consequently greater therapeutic efficacy of the passive traction treatment at the lumbar level. Please express your preference for the upholstery color.

09430.W ? TRAPEZOID CUSHION Dimensions: 40 x 49 x 30 h cm



Tractions Positioning cushions

Wedge cushion



It allows you to offer adequate support to the patient's head during a cervical traction treatment in the supine position. Please express your preference for the upholstery color.

09440.W ? WEDGE CUSHION Dimensions: 44 x 41 x 15 h cm



Semi-cylindrical cushion



It is an alternative cushion to support the patient at the cervical level when lying in the supine position. It improves the patient's comfort condition in lumbar passive traction treatment situation.

09450.W ? SEMI-CYLINDRICAL CUSHION Dimensions: 29.5 x 14.5 x 8 h cm



AC0078.W ? SET OF CUSHIONS The set includes:

 09430 TRAPEZOID CUSHION
 1 pc

 09440 WEDGE CUSHION
 1 pc

 09450 SEMY-CYLINDRICAL CUSHION
 1 pc



? CHOICE OF UPHOLSTERY COLOR - Please always specify the upholstery code along with the chosen item when this option is available.

Α

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3

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М

Tractions Active Lumbar Traction table

The Active Lumbar Traction originates from the Swedish method of auto-traction, a mechanical type of treatment for lumbosciatic pain due to benign mechanical compression causes.

12065 TLA TABLE

Physiotherapy table with a special design, being divided transversely. The caudal section of the table can be slowly tilted up- or downwards and rotated in the left or right direction by means of an electric servomechanism, through which the therapist can position or mobilize the lumbosacral spine tridimensionally. Traverse and speed of rotation will stay within a safe range. The table is fitted with special vertical and transveral bars, some of which are located in the cranial section. Patients can cling to these bars "pulling" their body, performing in this way an "Active Lumbar Traction". To prevent slipping during traction, patients are secured by a pelvic belt to the caudal section of the table, where they can push or pull other bars with their lower limbs.

STANDARD ACCESS	ORIES
	Q.TY
Fastening strap 180 x 8h cm	1
Large pelvic belt	1
Small pelvic belt	1
Wedge cushion	1
Semi-cilindrical cushion	1
Paper-roll holder	1
Goniometers	3
Guide lines - therapy manual	1



Therapeutic indications

The Active Lumbar Traction is a method consisting in therapeutic rehabilitation exercises and such it must be prescribed by a physician and administered by a therapist.

The treatment can be applied to a wide range of conditions defined in various ways: back pain, sciatica, narrow canal syndromes, herniated disc, radiculitis and so on. "Lumbago" and "sciatica" are insidious clinical conditions. most of these syndromes are ultimately caused by a benign mechanical compression on the nerve endings due to disc herniation or protrusion. The latter might occur with or without the existence of bone dysmorphologies (osteophytes, congenitally narrow canal) and with the interference of the above-described vascular processes.

A small part of the above described syndromes are on the contrary

due to an increadibly wide range of pathologies, such as, for exhample, aortic aneurysm, vertebral metastasis, osteoid osteoma, spondylolisthesis and many others. Fortunately, our treatment turned out to be harmless for most of these cases; however this is not a good reason to administer in uselessly.

Very often our typical patients voluteer for TLA treatment after a long diagnostic and therapeutic history. Patients might not have been already submitted to examinations, such as rays, CT or NMR. In this case, if we presume that the patients' symptoms are caused by a disc protrusion or by a narrow canal syndrome (and surgical intervention does not seem inevitable) it is reasonable to start with 3 sessions of Active Lumbar Traction. Further examinations shall be made only if the treatment proves ineffective.





The pelvic belt must be fastened and hooked by means of special strap to the fixing ring placed in the legs section of the table to prevent the slipping while patient is doing strong active traction exercises with contemporary lower limb pushing.



01315

TREATMENT GUIDE LINES HANDBOOK

Clinical and pathophysiologic review.

Author: Luigi Tesio, Alessandra Merlo, Alessandra Raschi Language: English/Italian Printed in: April 2004 Edition: Il

Edition: II Pages: 52

I first became acquainted with the autotraction method in Sweden in 1984. I have decided to introduce it in Italy in 1985 and from then on I have prescribed it to over 2.000 patients suffering because of one or more lumbar herniated discs. This manual is mainly based on my and my coworkers' experience in Milan between 1985 and the beginning of 2004.

"The Active Lumbar Traction, or TLA, originates from the Swedish method of "autotraction", a mechanical type of treatment for lumbosciatic pain. This manual is divided into three chapters, each one independent from the others. Readers who wish to have a preliminary idea on the method should look directly at the third chapter, where the subject has been concentrated in 15 questions with relative answers. If, on the other hand, readers are already acquainted with the general principles of the method but wish to understand it's practical use, they can refer to the second chapter, which deals with the treatment technical procedures.

Readers willing to know about the origin of the method and its scientific premises should instead go through this introduction and the first section of the manual."

Dr. Luigi TesioDirector of the Clinical Unit and the Laboratory of Research,
Neuromotor Rehabilitation
Istituto Auxologico Italiano IRCCS, Milan (Italy)



Tractions Active Lumbar Traction table

Initial positioning of the patient

The patient is invited to take off his/her shoes, trousers or skirt. It is not necessary to take off all clothes unless they prevent the patient from moving his/her upper limbs freely. While the patient is still standing, a pelvic belt will be put on him Although not fastened. After these preliminaries, the patient is required to lie supine on the treatment table, as shown in Figure 1.

The terapist checks if pain increases when the patient stretches out his/her lower limbs. If so, tratment will continue as indicated in Figure 2. If pain does not increase, the patient will remain supine and stretch his/her lower limbs. The lumbar region should be positioned over the opening between the two sections of the table; the patient's positioning down not require centimetric precision.

The terapist will then start to tilt, extend and rotate the table distal section in both directions so as to determine which positions cause a possible increase or else a decrease in pain. At this stage, the patient might be requested to lie on his/her side (Figure 4). In this case, the flexion/extension of the distal section of the table will induce a right or left inclination of the patient's lumbosacral spine.

Treatment will start with the patient lying in the least painful position, in any. Otherwise, the treatment will be administered with the patient lying in a supine position.

Patient's "anchoring" to the treatment table

At this point the pelvic belt must be fastened and hooked by means of special strap to the fixing ring placed in the legs section of the table. The strap should not be very tight. This procedure is not aimed at producing a passive pelvic traction, as in the conventional traction treatments. Rather it is meant to prevent the patient from slipping towards the head section of the table while he is doing strong active traction exercises with contemporary lower limb pushing. If the patient is eccessively overweight or lacks muscular strenght, body friction against the table will already be enough to keep him steady.

When the use of a pelvic belt is not advisable, the patient can maintain a steady position by "anchoring" his feet to the bars of the treatment table (picture 3)

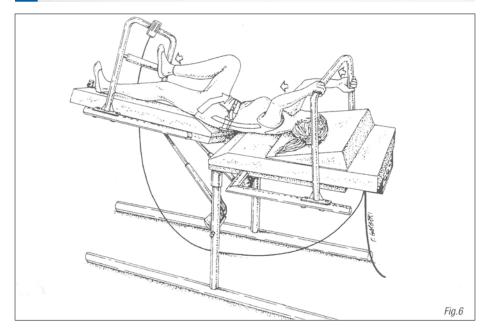












Upper limbs and head positioning

In general the patient's hands should be placed at half lenght on the vertical bars. If the patient cannot easily abduct one or both shoulders, he/she can keep his/her arms abducted and hold onto the horizontal bar located over his head. A wedge cushion can be put under the patient back so as to keep his/her trunk and head slightly flexed.

Active Lumbar Traction: the manoeuvre

Let's suppose that treatment is performed, as it usually happens, with the patient being lying on his/her back. Figures 2 and 3 show some standard TLA movement patterns. The patient simply "pulls himself/herself" with his/her arms exerting maximal effort for 5-6 seconds and then relaxes. Both traction and relaxing have to be gradually developed. As a general rule, patients are expected to do this exercise holding their breath ("hold your breath while you are pulling yourself"). After that, there is a rest of 10-60 seconds.

Although it may seem very simple, this exercise is not always properly performed. The most common mistakes are the following:

- patient can exert only sub-maximal efforts. The patient might have a strong hand-grip on the bars but does not exert maximal effort in the traction as well;
- co-contraction of flexors and extensors: this results in an isometic upper limb contraction without traction being transmitted to pelvic belt.
 - back "arching". The patient tends to contract also some extensory muscles thus involving his/her lower limbs, too. This causes the lumbosacral spine to arch as well.

In order to prevent back arching, it might be useful to ask the patient to flex his/her lower limbs and place his/hr feet on one of the table rear bars. Sometimes the therapist can ask the patient to assume the initial position as shown in Figure 3. After the therapist has placed one hand under the patient's heel or buttock, the latter is expected not to press onto the therapist's hand while pulling.

(For more information and details we invite you to see the Active Lumbar Traction handbook for treatment guide lines, clinical and pathophysiologic review.)

Tractions Cervical and lumbar traction systems



AC1106 CHIN BELT

This support restrains the head while performing cervical traction exercises. It is reinforced and has Velcro fastenings. Supplied together with metal spreader bar ref. code AC0323. Dimensions: $35 \times 7 \times 0.5 \text{ cm}$ Weight: 250 g.



07950 STANDARD PULLEY

Basic element to be used in combination with snap hook code AC0094 to configure the exercises. The pulley can be rotated so it can be used in any direction. (single item). Dimensions: $10 \times 5 \times 2.5 \text{ cm}$; Weight: 84 g.



07980 ROPE PER METRE Nylon rope. Sold by the metre.

07981 30 M ROPE SET

Basic element - 30 m long nylon rope.



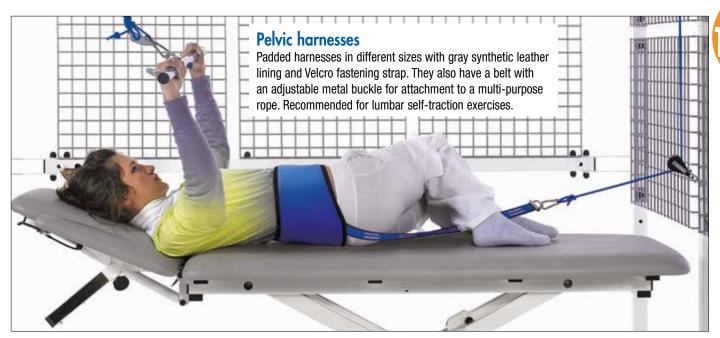
ACOO77 SET OF BAGS

The set includes n. 6 bags with different weights ranging from 0.5 kg to 1-2-3-4-5 kg. They can be applied as hanging weights during mechanical tractions. They can be supplied also as single items.



Cervical or lumbar tractions can also be performed using the ARCHIMEDE system structures for suspension and pulley therapy exercises.

Tractions Cervical and lumbar traction systems





ACO321 PELVIC HARNESS - SMALL Dimensions: 112 x 32 x 1.5 cm;

ACO320 PELVIC HARNESS - LARGE Dimensions: 136 x 33 x 1.5 cm



AC0302 EXERCISE BAR

Coated tubular metal bar with 3 rings for attachment to a rope and other accessories through a snap hook. (single item); Dimensions: cm 111 x 11,5 x 4; Weight: Kg 2



AC0094 SNAP HOOK

Basic multi-purpose element, used to safely link the grid / frame and the various pieces of equipment. Dimensions: $7 \times 3.5 \times 0.7 \%$ cm Weight: 25 g.

Pneu-Trac collar is a light, comfortable device and easy to wear, with a superior quality compared to the traditional traction device. Relief for pain is obtained thanks to an inflatable collar which enables the patient to regulate the pressure according to the level of traction required. This unique characteristic enables the help of the patient to advance in the treatment at home or with a specific exercise program. A hand pump with a valve is used to control the device. In this way, it is possible to exert static or intermittent tractions.

Key features

- Provides movable cervical traction
- Relieves the neck and shoulders for pain caused by the cervical area or the spine discs
- Adjustable traction pressure
- Can be worn anywhere

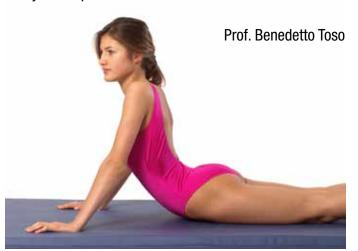




Stretching and mobilization exercises

"In the work and sport life, some postures or movements which imply an excessive pressure of the spine discs are often adopted and done. In such cases, it is important to perform some exercises to lessen the pressure on the discs. Relief can be obtain in some ways:

- Actively with some stretching exercises;
- Manually, when traction is performed by the carer (very efficacious because the carer can feel and check on the patient's reactions directly);
- In a natural way with suspension exercises and with some devices which allow gravity inversion;
- With some traction devices for the spine which focus the lessening effect at a given point and enable to adjust the power of traction as desired."

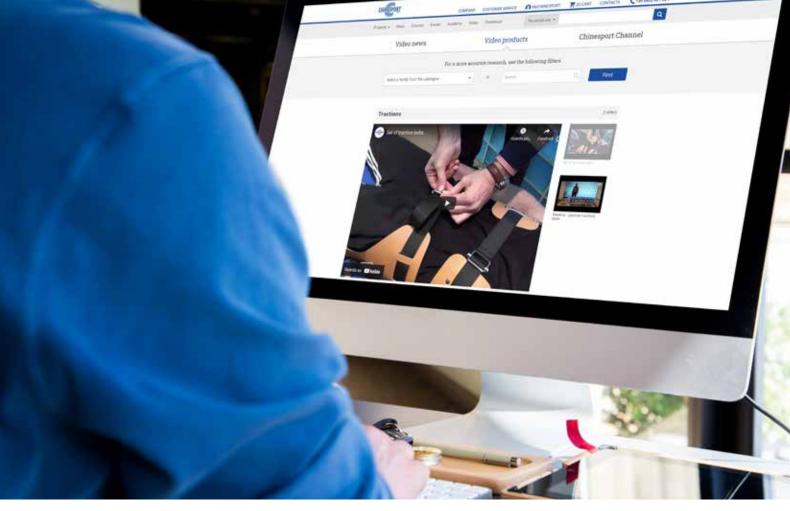








Let us invite you to see also the wide variety of tools for mobilizations and stretching exercises as presented at chapter "Postural gymnastics".



Chinesport's website has also been designed and set up for those using mobile phones or iPads, not necessarily because they are out-and-about or travelling, but because they wish to know more about it while using our catalogue or other documentation. We are constantly involved in publishing new detailed information, photos (now even bigger), videos and multimedia files that are worth sharing.

Point, and explore the video!









Chinesport is based in Udine, Italy, between the Alps and Venice. For over 40 years we have been dedicated to healthy posture for healthy movement. The root of our company name refers to the Italian word "chinesiterapia", or movement therapy. We strongly believe and adhere to "movement culture" as a way to prevent and cure injury and disease.

Today we are a global leader in developing and manufacturing rehabilitation equipment and assistive devices. We have excellent and long-standing business relationships in almost 80 countries worldwide. The Chinesport general product catalogue contains over 1.000 innovative, high-quality products. New catalogue editions that include the latest product innovations and trends are regularly published. Our own medical-scientific training and educational program is continuously expanding and caters for all specialised rehabilitation fields. As an organisation, we have been working with a certified quality management system and in compliance with international ISO 9001 and ISO 13485 standards since 1998.





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