

Resistive-Capacitive Energy Transmission and an Integrated Transdermal Transport

EL12002 TCARE

This new device, unlike the Tecar and Endotherapy electro-medical devices, allows the physiotherapist to use two treatment methods simultaneously, combining a resistive/capacitive energy transfer and the diffusion of the active agent (where prescribed by a physician), with a (patented) hand piece called ROLL-ON. This electro medical device has a storage surface at the top for a wide range of applied parts (see coded list). Moreover the device features:

- Less than 50% of electromagnetic leakage in the work environment, resulting in a benefit for both the patient and the medical operator;
- Reduction of dielectric arcs when removing the Roll-On hand piece;
- Continuous therapist monitoring of the energy absorbed by the patient, and possibility of regulating the frequency according to the absorption, also optimising diffusion of the active agents;
- The possibility of dealing incisively, completely, and multi-dimensionally with various musculoskeletal affections at an acute stage (characterised by extensive pain, low tolerance to contact, manipulation and traditional therapeutical methods in general), due to combining the transfer of energy with transdermal delivery of any active agent;



Even though the video shows a previous model of Chinesport's TCARE Cellular Regenerator, an overview is provided of the accessories supplied as standard or available separately. For the EL12002 model, the handpieces supplied with the equipment, for both capacitive and resistive mode, are original patented Roll-On handpieces. Pen-shaped handpieces can be supplied when requested specifically.

TECHNICAL DATA

ARTICLE CODE	EL12002 TCARE
Working frequency	0,8MHz, 1 MHz, 1,2MHz
Output passive plate	1
Manual output capacitive electrode	1
Manual output direct coupling electrode	1
Manual mode	400Ω
V rms (aprox.)	320
Watt rms (aprox.)	150
Input voltage	115÷230VAC ± 10% 50/60Hz
Maximum input power	200 W
Ambient working temperature	+10 ÷ +30 °C
Maximum temperature storage and transport	+10 ÷ +70 °C
Maximum humidity storage and transport	25 ÷ 85%
Passive plate area	aprox. 220 cm ²
Roll-On capacitive electrodes	Ø 40 mm - Ø 56 mm - Ø 80 mm.
Direct coupling electrodes	Ø 40 mm - Ø 56 mm - Ø 80 mm
Active medical devices	CLASS II B
Weight	40 kg
Dimensions	60 x 80 x 115 cm

SUPPLIED ACCESSORIES:

- EL0147 MINI CAPACITIVE ROLL-ON 40 mm
- EL0163 MINI RESISTIVE ROLL-ON 40 mm
- EL0113 CAPACITIVE ROLL-ON 80 mm
- EL0129 RESISTIVE ROLL-ON 80 mm
- EL0122 PASSIVE PLATE
- EL0164 MEDIO CAPACITIVE ROLL-ON 56 mm
- EL0165 MEDIO RESISTIVE ROLL-ON 56 mm
- AC0665 ELASTIC BAND cm 60
- AC0667 ELASTIC BAND cm 100
- EL0148 DISPENSER WITH CAP
- EL0128 BALL CAP
- EL0149 MINI DISPENSER
- EL0125 CONDUCTIVE CREAM 1KG
- EL0124 ROLL-ON CONDUCTIVE CREAM 500 ML

OPTIONAL ACCESSORIES:

- EL0114 CAPACITIVE HANDPIECE
- EL0116 6.5 CM CAPACITIVE ELECTRODE
- EL0117 5.3 CM CAPACITIVE ELECTRODE
- EL0118 3.3 CM CAPACITIVE ELECTRODE
- EL0115 RESISTIVE HANDPIECE
- EL0119 6.5 CM RESISTIVE ELECTRODE
- EL0120 5.3 CM RESISTIVE ELECTRODE
- EL0121 3.3 CM RESISTIVE ELECTRODE
- EL0176 ROLL-ON CREAM SET 6 PCS

ACCESSORIES SUPPLIED

These are shown to provide for any subsequent requests for spare parts.



EL0147
MINI CAPACITIVE ROLL-ON 40 MM



EL0163
MINI RESISTIVE ROLL-ON 40 mm



EL0113
CAPACITIVE ROLL-ON 80 mm



EL0129
RESISTIVE ROLL-ON 80 mm



EL0122
PASSIVE PLATE



EL0164
MEDIO CAPACITIVE ROLL-ON 56 mm



EL0165
MEDIO RESISTIVE ROLL-ON 56 mm



AC0665
ELASTIC BAND cm 60



AC0667
ELASTIC BAND cm 100



EL0148
DISPENSER WITH CAP
Pack of 12 pieces each



EL0128
BALL CAP
Disposable, 100 pieces pack



EL0149
MINI DISPENSER
100 pieces packs. Ball cap included

OPTIONAL ACCESSORIES



EL0114 CAPACITIVE HANDPIECE



EL0115 RESISTIVE HANDPIECE

EL0116 6.5 CM CAPACITIVE ELECTRODE

EL0119 6.5 CM RESISTIVE ELECTRODE

EL0117 5.3 CM CAPACITIVE ELECTRODE

EL0120 5.3 CM RESISTIVE ELECTRODE

EL0118 3.3 CM CAPACITIVE ELECTRODE

EL0121 3.3 CM RESISTIVE ELECTRODE



Roll-On conductive cream used for TCARE treatment

The cream is absolutely necessary for transdermal delivery during the TCARE treatment. It has a high conductive power and improves performance in the optimal capacitive and resistive treatment phase.

EL0124
ROLL-ON
CONDUCTIVE CREAM
Liquid cream.
A set of 2 packs.

EL0176
ROLL-ON CREAM SET
A set of 6 packs.



EL0125
LUBRICATION CREAM
This dense cream can be used on both pen-shaped electrodes (now available as additional accessories only) and the passive return plate. 1 kg tub.



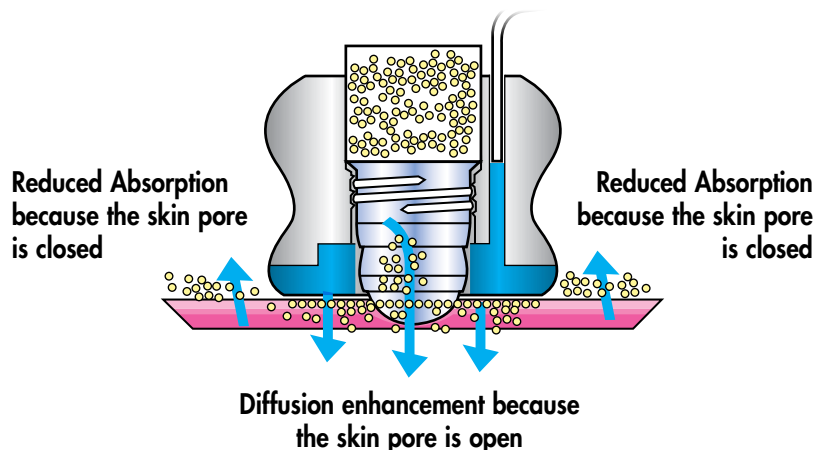
Therapeutic indications

- Muscular injuries
- Joint capsulitis
- Distortions
- Neck pain
- Bone and ligament trauma
- Tendon injuries and bursitis
- Lumbalgia and ischialgia
- Myositis
- Arthrosis processes
- Rehabilitation programmes



THE PATENTED ROLL-ON HANDPIECE

The special patented handpiece, known as the ROLL-ON, means that the TCARE Cellular Regenerator device guarantees the best geometric application for achieving capacitive-resistive energy transfers. The particular shape of the handpiece provides an extensive contact area between the electrode and the patient's skin, while the ROLL-ON's functionality ensures that, unlike traditional handpieces, the correct quantity of cream is released at the contact interface on a real-time basis. This is sufficient to guarantee the development of the electro-chemical gradient, without allowing any dielectric arc to be formed. It also makes it possible to avoid wasteful dispersion of conductive cream, which provides significant savings in the operating costs sustained by professionals that use the device.



GASTROCNEMIUS TREATMENT - CAPACITIVE MODE:

The operator transfers energy and medicines into the patient's gastrocnemius muscle. The effect will be hypervascularization of tissue, and consequently its filling with oxygen, nourishing factors, enzymes on the arterial side, and drainage of catabolites on the venous side.

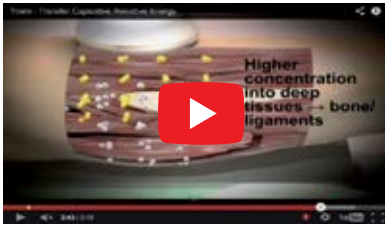


A normal complete sequence of operations is shown, for using the Roll-On handpiece combined with transdermal delivery of an active ingredient prescribed by a doctor. The dosage of Chinesport's conductive cream and the additional medicine is also specifically indicated.



1. CAPACITIVE MODE

The warming sensation generated inside the body depends on various factors, and can be perceived by the patient at intensities that range from warmth to intense internal heat. When using capacitive electrodes, the diameter of the electrode and speed of movement must be considered in particular. For the same amount of power applied, larger diameter electrodes increase the temperature more gradually and, in addition, the faster the electrode is moved, the less the heat sensation felt by the patient. It is good practice to choose the electrode with the largest area possible in relation to the area to be treated. The electrode can be applied, both staying still in the area treated and using circular or linear movements, depending on the area treated and power you wish to apply. It is very important that most of, if not all of, the electrode's area be in contact with the patient's skin, following any curves and irregularities in the area treated, and continuously adapting to it. The electrode holder handgrip is specifically designed to minimise effort on the part of the operator and to make the treatment more pleasant for the patient (deep massage action, as if the electrode were an "extension of the operator's hands").



Higher concentration into deep tissues → bone/ligaments

RESISTIVE - CAPACITIVE MODE: The video shows a simulation of the effects of the resistive or capacitive mode, combined with one of the three different working frequencies for the TCARE Cellular Regenerator.

2. MANUAL MODE WITH DIRECT - RESISTIVE COUPLING

Direct coupling means using the TCARE Cellular Regenerator with uninsulated metal electrodes (no dielectric device interposed). The action mechanism, caused by polarity reversal of the current, produces a quicker and more intense increase in heat in tissue deprived of water and electrolytes (bone tissue and adipose tissue especially). This application method is therefore more indicated, perhaps along with the capacitive mode, for pathologies involving these parts of the body. Since the active electrode is not insulated, the current that moves the charges and the temperature generated in the body are less concentrated in the area immediately below the active electrode, producing a directional aspect guided by the passive electrode (return plate). In other words, one substantial difference from the capacitive mode lies in taking great care when positioning the return electrode, which directs impulses generated by the active electrode. Another difference is that the active electrode remains in a set position or slight rotational movements are made with a diameter slightly larger than that of the electrode used, and continually adjusting the power applied so that the temperature perceived by the patient is pleasant.

KNEE TREATMENT - RESISTIVE MODE:

The operator gets the patient to move their knee into flexion/extension to concentrate Tcare action in the inflamed zone and gain a wider range of motion (e.g. knee collateral ligament)



ELBOW TREATMENT - RESISTIVE MODE:

The operator gets the patient to move their shoulder into abduction to concentrate Tcare action in the affected area and gain a wider range of motion (e.g. capsulitis of shoulder)



ANKLE TREATMENT - RESISTIVE MODE:

The operator gets the patient to move their ankle into plantar flexion to increase tissue resistance and so concentrate the highest amount of energy precisely into the damaged zone (e.g. Achilles tendonitis or plantar fasciitis). Treatment is very comfortable for the patient.

