

Electrotherapy

Vacuumtherapy

Combined devices

High Power Laser

Low Power Laser

Scanning Laser

Magnetotherapy

Pressotherapy

Ultrasound

Radartherapy

# B TAIL A

Founded in 1983 in Pesaro, EME has established itself over the years as a leading company in the production of electromedical products for physiotherapy, aesthetic medicine and aesthetics. All EME technologies are the result of continuous research and a strong synergy between the internal Research and Development department, the real heart of the company, and specialists in the sector and institutions.

This allows us to offer more performing and innovative solutions and to update the existing ones thus offering the market 100% Made in Italy, cutting-edge and highly reliable products. Currently our products are distributed in over 60 countries worldwide and are globally recognized for quality and performances, so much so they have been chosen by sports teams, sports federations and high level clinics.

Anyway what matters more than numbers and references is the vision that has leaded us and inspired us for more than 30 years: "Offer the opportunity for everyone to feel good with their body, in health and harmony".

Every day we work for this: to guarantee concrete results for patients all over the world. We do this offering our partners cutting-edge technologies and specific training to achieve the best possible results.

All EME technologies meet MDD 93/42/EEC medical directive and are certified CE 0476. EME is a company certified ISO 9001: 2015, ISO 13485: 2016.









R&D Department

**Production Department** 





Sales Department



**Istomer Care** 

### Official testimonial

#### Elisa Di Francisca

Olympic foil fencing champion

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We share the same values: Italian pride, body care to improve performance and natural beauty. EME and I will be together until the Tokyo Olympics, where I will compete for the third Olympic gold medal.

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### Official supplier



























# **Electrotherapy**

#### Electrotherapy is mainly used for:

- Training of the neuromuscular system
- Modulation of pain
- · Control or reduction of spasticity
- Transdermal release of medicinal substances
- Improvement or maintenance of joint mobility
- Promotion of wound healing
- · Resolution of the edema





**Therapic 9400** - TH1313



**Therapic 9200** - TH1312

Waveform	Therapic 9200 Therapic 9400
Monophase	max 70 mA/70 V
Diphase	max 70 mA/70 V
Sync. Monophase	max 70 mA/70 V
Sync. Diphase	max 70 mA/70 V
Short period	max 70 mA/70 V
Long period	max 70 mA/70 V
Rectangular	max 100 mA/100 V
Exponential	max 100 mA/100 V
Triangular	max 100 mA/100 V
Traebert	max 100 mA/100 V
Rectangular faradic	max 80 mA/80 V
Modulated faradic	max 100 mA/100 V

Triangular neodynamic	max 80 mA/80 V
Neodynamic	max 80 mA/80 V
Tens	max 100 mA/100 V
Tens S/A/R	max 100 mA/100 V
Tens random S/A/R	max 100 mA/100 V
Tens burst S/A/R	max 100 mA/100 V
Biphasic S/A	max 100 mA/100 V
Galvanic	max 50 mA/50 V
Iontophoresis	max 50 mA/50 V
Kotz (Russian stimulation)	max 100 mA/100 V
Interferential	max 100 mA/100 V
Classic Interferential	max 100 mA/100 V
Isoplanar Interferential	max 100 mA/100 V
Vectorial Interferential	max 100 mA/100 V

# Vacuumtherapy

Vacuum therapy uses the effect of vacuum associating an improvement in microcirculation, an anti-inflammatory and detoxifying action.

Vacuum therapy is ideal for the **treatment of all vascular diseases** affecting the lower limbs: arteriosclerosis, Buerger's disease, Raynaud's syndrome; and moreover of all the forms that involve venous and/or lymphatic insufficiency such as lymphedema and phlebolynphedema.

Vacuumed can be connected to combined devices (Combimed 2200-4000) and electrotherapy devices (Therapic 9200-9400) for combined treatments.



Vacuumed - VU1392



### Combimed



Electrotherapy exploits biological effects from electrical energy for therapeutic purposes and it is mainly used for:

- · Training of the neuromuscular system
- · Modulation of pain
- · Control or reduction of spasticity
- · Transdermal release of medicinal substances
- Improvement or maintenance of joint mobility
- · Promotion of wound healing
- · Resolution of the edema



Combimed 4000 - C01326

### ·)) Ultrasound

The application of ultrasound results in a high-frequency cellular and intercellular massage action. Also the tissues irradiated with ultrasound enter into vibration, the result is an expenditure of energy with consequent production of heat. It also occurs the cavitation phenomenon that activates the <u>oxidation and polymerization processes</u>. <u>Ultrasounds</u> are mainly used for pain reduction.

The combined treatment, electrotherapy + ultrasound, adds the analgesic and hyperemic effect of the electrical stimulus to the mechanical and thermal effect of ultrasound.



### Laser LLLT

Laser therapy is based on photochemical and photobiological effects in cells and tissues. Laser light stimulates the mitochondria of the cell, recharging it with energy and regerating it in the case of traumatic situations.

- · Anti-inflammatory effect
- Effects on the peripheral nervous system (antalgic and regenerative effect)
- · Biostimulating effect and tissue regeneration
- Effect on microcirculation and on blood vessels: the laser improves local microcirculation giviing relief from local spasms of the arteriolar and venular vessels
- · Enzymatic photoactivation effect

### devices

#### 3 + 1 technologies

Combimed 4000 is a physiotherapy platform equipped with 3 technologies: ultrasound+ electrotherapy + LLLT laser

Also compatible with Vacuumed vacuum therapy for an even more complete therapy.

#### **□B** Multitherapy mode

The **multitherapy protocols** use ultrasound, electrotherapy and laser therapy sequentially. In this way it is possible to take the maximum advantage of each technology and treat different pathologies effectively.

#### Combined mode

Electrotherapy and ultrasound can be used simultaneously in combined protocols.

Software with anatomical library
The software has been designed to be intuitive and functional. You can select the "free procedure" and set the desired parameters for the therapy or use preset protocols by selecting the anatomical area to be treated. Each protocol has an "Online help" that contain indications for an optimal treatment.

#### LSE Laser Safety Eyes patent

laser delivery starts only when the lens is brought closer to the skin, ensuring greater safety for the patient and the operator.

#### **Automatic contact sensor**

The ultrasound probe is equipped with a special sensor that ensures the correct contact for an optimal treatment.







# **High power**



The high power laser is a very appreciated technology thanks to the excellent results that could be reached in a very short application time. The EME high power lasers of EME, thanks to the **high power** (from 8 W to 25 W), real and guaranteed by using a single diode, allow a high and deep energetic transfer, and consequently a substantial reduction in time of treatment.

Vikare 8 W - HL 1361

#### **Photomechanical action**

The high laser energy impacts on the tissue surface generating real pressure pulses that reactivate the microcirculation and stimulate the deep lymphatic system. This leads to a consequent oxygenation of the tissues and reabsorption of the liquid accumulations.

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The energy absorbed by the chromophores in the tissues induces chemical modifications: structural modifications of the molecules and reactions that facilitate the enzymatic activation and the synthesis of nucleic acids and proteins.

#### **Photothermal action**

The electromagnetic energy is transformed into thermal energy inducing a controlled increase in the tissues temperature, with consequent stimulation of the circulation and increase in the supply of oxygen and nutrients to the suffering areas.

#### Continuous mode and pulsed mode

The EME high power lasers can work both in continuous mode or in "Duty Cycle" pulsed mode. The Duty Cycle allows to decrease the laser photothermal effect (which determines an increase in the local temperature). Treated tissues will cool rapidly, between one pulse and other, making more effective the biostimolation effect.

◆ 4 differents spots in one probe thanks to the practical spacing system.



### laser

#### **Therapeutic effects**

### **Biostimulating and regenerative effect**

It facilitates cellular energy processes, growth and tissue repair. Stimulates the production of collagen and elastin and the production of ATP.

#### **Analgesic effect**

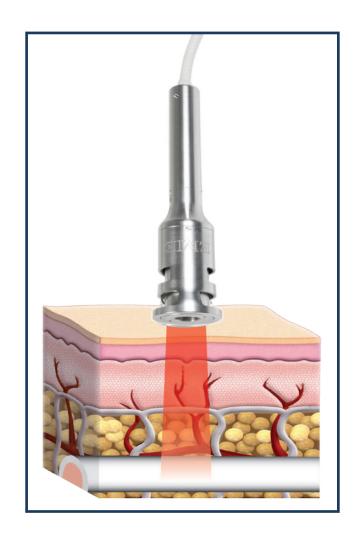
It stimulates the peripheral nervous system and the nociceptors in the subcutaneous tissue, blocking pain and giving immediate relief (Gate Control Theory).

#### Anti-inflammatory and antiedema effect

It accelerates the resolution of inflammation by increasing vasodilation with consequent tissue oxygenation and activation of metabolic processes.

#### Effect on the microcirculation

It has an intense vasoactive action on the microcirculation and lymphatic drainage. The activation of the microcirculation facilitates the supply of oxygen, nutrients and drainage of catabolites from the tissues.







### Low power laser



Lasermed 2200 is a low power contact laser. It is ideal for **stimulating trigger points** or **treating locodolent areas**.

- · Anti-inflammatory effect
- Effect on the peripheral nervous system (antalgic and regenerative effect)
- · Biostimulating effect and tissue regeneration
- · Effect on microcirculation and blood vessels
- Immonumodulating effect
- Effect of enzymatic photo-activation

Lasermed 2200 - LT1372

#### **LSE Laser Safety Eyes patent**

Laser delivery starts only when the lens is brought closer to the skin, ensuring greater safety for the patient and the operator.

#### **Automatic calculation of fluency**

as a function of time and treatment area (joules/cm<sup>2</sup>).

#### Up to 800 mW of power and 2 independent channels

Two independent channels allow you to work with two probes of different powers and frequencies. It is also possible to connect different monodiodic and multi-diode probes up to a maximum power of 800 mW.



# Scanning laser

Scanning laser is an operator-free technology that allows you to treat larger areas than contact lasers.

#### **PR999 4W**

It works with two 2W diode sources and two different wavelengths: 808 nm + 940 nm. The double wavelength allows a high **anti-inflammatory and analgesic effect**, ideal for the treatment of diseases in acute form and/or with the presence of inflammation.

#### **PR999 8W**

It works at an effective power of 8W, thanks to the use of a single diode with a wavelength of 980 nm.

- · Biostimulant and regenerative effect
- · Analgesic effect
- · Anti-inflammatory and anti-edema effect
- · Effect on the microcirculation





Stepping motor

generates micro-oscillations to increase the setted treatment area up to 5%

- Automatic setting of the area to be treated
- Scanning area adjustable up to 400 cm<sup>2</sup>
- Compatible with an external laser probe

# Magnetotherapy

Magnetotherapy equipment generate a low-frequency magnetic field that improves **tissue regeneration**, especially bone tissues. The most commons indications are:

- · Recent fractures and consolidation delays
- Pseudoarthrosis
- Sudeck's disease and osteoporosis
- · Inflammatory and degenerative arthropathies
- Obliterative arteriopathy
- Bedsores
- Psoriasis



The EME applicators, thanks to the innovative MFC shielding system, drastically reduce the magnetic induction produced outside. This ensures a greater safety for the operator.

#### W.I.S - Wood Injection System

Innovative and eco-friendly technology used to make solenoids. The robust, light and ecological wood is processed at high temperatures and pressed into special molds.



Magnetomed 8400 - MA1334



Magnetomed 7200 - MA1331



# Pressotherapy



The main therapeutic indications of EME equipment for **peristaltic pressomassage and veno-lymphatic drainage** are:

- Circulatory insufficiency
- Lymphatic stasis
- Hydro-lipo-dystrophy
- · Lymphedema
- Edema
- · Post-operative recovery
- · Hypotony

Pressomed 2900 - PR1380

Pressomed Evo - PR1382



#### **Kit Point**

Leg sleevs have independent sectors, overlapped like a "herring bone", by means of which the pressing push gradually overlap itself without leaving interspaces during the inflating

#### **Express-mode deflation**

It allows a quick and silent deflation of every sectors.

#### Warm up

Thanks to a general pre-inflation on all sectors at aprox. 30 mhg (+/-) the treatment can be quicked.

#### **Total Body**

It is possible to treat lower and upper limbs simultaneously (Pressomed Evo).



### **Ultrasound**

The application of ultrasound results in a high-frequency cellular and intercellular massage action. The tissues irradiated with ultrasound also enter into vibration, resulting in energy expenditure and heat production. Moreover, the cavitation phenomenon occurs that activates the oxidation and polymerization processes. Ultrasound are mainly used for **pain reduction**.



**Ultrasonic 1300** - US1321



**Ultrasonic 1500** - US1322

Ultrasonic 1300 and 1500 can be connected to Therapic 9200 and 9400 electrotherapy devices for combined treatments.

# ) Automatic contact sensor

The probes are equipped with a sensor that ensures the correct contact for optimal treatment.

**Waterproof probes** suitable for submerged treatments.





# Radartherapy

The microwave diathermy creates an **endogenous heat** in the treated tissues that is transmitted in the deep layers. The greatest warming occurs in tissues with a high water content such as muscles. Radar therapy is indicated in cases of muscle contractures, arthritis, post-traumatic pain, tendinitis, etc. The therapeutic effects of radar therapy are:

- Pain reduction
- · Improvement of the extensibility of collagen
- Reduction of joint stiffness
- · Reduction of inflammatory edemas and exudates
- Increase in blood flow





# **Technical features**

Features	Therapic 9200	Therapic 9400
Operation	Constant Voltage Constant Current	Constant Voltage Constant Current
Peak power	100 V	100 V
Peak current	100 mA	100 mA
Independent output channels	2	4
Stored protocols	yes	yes
Storable protocols	200	200
Ultrasound and vacuumtherapy connection	yes	yes
Display	Graphic colour 320 x 240 px Touch & Scroll	Graphic colour 320 x 240 px Touch & Scroll
Dimensions - Weight	39 x 14 x 30 cm - 4,4 kg	39 x 14 x 30 cm - 4,4 kg

Supplied accessories	Therapic 9200	Therapic 9400
60x85 mm electrodes	4	8
Sponges for 60x85 mm electrodes	4	8
50x50 mm electrodes	4	8
Sponges for 50x50 mm electrodes	4	8
10 cm elastic band	2	4
6 cm elastic band	2	4

Features	Vacuumed
Operating temperatures range	(+110 : + 40) °C
Depression	(0 : 0,6) bar
Maximum pulses with full scale frequency	60 with minimum suction intensity 15 with maximum suction intensity
Output channels	2
Dimensions - Weight	31x11x35,5 cm - 6,4 kg

Supplied accessories	Vacuumed
Vacuum cups ø 60 mm	4
Vacuum sponges ø 60 mm	8
Link cable for vacuum-electrotherapy combined use	1

Features	Combimed 4000	Combimed 2200
Technologies	electrotherapy - ultrasound - LLLT laser	electrotherapy - ultrasound
Compatibility with vacuumtherapy	yes	yes
ULTRASOUND - probe	multifrequency 1/3 Mhz	multifrequency 1/3 Mhz
ULTRASOUND - stored protocols	yes	yes
ELECTROTHERAPY - outputs	2	1
ELECTROTHERAPY - waveforms	32	25
ELECTROTHERAPY - stored protocols	yes	yes
LLLT LASER - wavelenght	905 nm	-
LLLT LASER - frequency	100-10.000 Hz	-
LLLT LASER - stored protocols	yes	-
US + ET combined protocols	yes	yes
Multitherapy protocols	yes	-
Display	colour touch screen 10.1"	320x240px colour Touch&Scroll
Dimensions - Weight	61x37x23 cm - 7 kg	45x30x14 cm - 7 kg

Supplied accessories	Combimed 4000	Combimed 2200
Ultrasound	1- 5 cm² probe	1-5 cm² probe
Electrotherapy	4 - 50x50 mm electrodes 4 - 50x50 mm sponges for electrodes 4 - 60x85 mm electrodes 4 - 60x85 nm sponges for electrodes 2 - 60x5 cm elastic bands 2 - 100x5 cm elastic bands	4 - 50x50 mm electrodes 4 - 50x50 mm sponges for electrodes 4 - 60x85 mm electrodes 4 - 60x85 nm sponges for electrodes 2 - 60x5 cm elastic bands 2 - 100x5 cm elastic bands
LLLT Laser	1 100 mW probe 2 laser protective goggles 1 interlock	-

Features	Vikare 8 W
Wavelenght	980 nm
Peak power in continuous mode	8 W
Source type	diodo
Duty Cycle	10 - 100%
Emission	continuous and pulsed
Emission frequency	100 - 10000 Hz
Adjustable treatment time	up to 99 minutes
Stored protocols	yes
Storable protocols	200 + USB
Display	colour touch screen 5.7"
Dimensions - Weight	39 x 17,5 x 28 c m - 5 kg

Supplied accessories	Vikare 8 W
Defocused laser probe with optical fibre, integrated with the equipment	1
Laser protective goggles	2
Pedal	1
Interlock	1

Features	Lasermed 2200
Wavelenght	905 nm
Frequency	200 - 10.000 Hz
Pulse duration	100 ns
Emission	continuous and pulsed
Output channel	2
Stored protocols	yes
Storable protocols	200
Display	Graphic colour - 320 x 240 px Touch & Scroll
Dimensions - Weight	39 x 14 x 30 cm - 4 kg

Supplied accessories	Lasermed 2200
100 mW laser probe	1
Laser protective goggles	2
Interlock	1

Features	PR999 4W	PR999 8W
Wavelenght	808 nm + 940 nm	980 nm
Frequency	200 - 10.000 Hz	200 - 10.000 Hz
Power	2W + 2W	8W
Stored protocols	yes	yes
Storable protocols	200	200
Display	Graphic b/w 320 x 240 px	Graphic b/w 320 x 240 px
Dimensions - Weight	39 x 168 x 92 cm - 35 kg	39 x 168 x 92 cm - 35 kg

Supplied accessories	PR999 4 W - 8W
Laser protective goggles	2
Interlock	1

Features	Magnetomed 7200	Magnetomed 8400
Adjustable treatment frequency	1-100 Hz	1-100 Hz
Maximum induction for each applicator	100 Gauss	100 Gauss
Output channels	2	4
Stored protocols	yes	yes
Storable protocols	200	200
Display	Graphic colour 320 x 240 px Touch & Scroll	Graphic colour 320 x 240 px Touch & Scroll
Dimensions - Weight	39 x 14 x 30 cm - 3,5 kg	39 x 89 x 30 cm - 27 kg

Supplied accessories	Magnetomed 7200	Magnetomed 8400
Magnetic testing ring	1	1

Features	Pressomed 2900	Pressomed Evo
Number of pneumatic sectors	9	12
Maximum pressure	150 mmHg	150 mmHg
Stored protocols	yes	yes
Storable protocols	100	100 + USB
Display	Graphic colour 320 x 240 px Touch & Scroll	Graphic colour 8" Touch Screen
Dimensions - Weight	39 x 89 x 30 cm - 30 kg	39 x 89 x 30 cm - 25 kg

Features	Ultrasonic 1300	Ultrasonic 1500
Frequency	1/3 MHz	1/3 MHz
Output channels	1	2 independent
Peak power in continuous mode	2 W/cm <sup>2</sup>	2 W/cm²
Peak power in pulsed mode	3 W/cm <sup>2</sup>	3 W/cm²
Duty Cycle	10-100 %	10-100 %
Stored protocols	yes	yes
Storable protocols	200	200
Display	Graphic colour 320 x 240 px Touch & Scroll	Graphic colour 320 x 240 px Touch & Scroll
Dimensions - Weight	39 x 14 x 30 cm - 3,6 kg	39 x 14 x 30 cm - 4 kg

Supplied accessories	Ultrasonic 1300	Ultrasonic 1500
1/3 MHz 5 cm² probe	1	2

Features	Radarmed 2500 CP
Pulsed peak power	1600 W
Continuous peak power	250 W
Frequency	2450 MHz
Stored protocols	yes
Storable protocols	200
Display	Graphic colour 320x240 px Touch & Scroll
Dimensions - Weight	39 x 89 x 30 cm - 40 kg

Supplied accessories	Radarmed 2500 CP
Orthostatic pantograph arm	1
Circular antenna	1

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Via degli Abeti 88/1, Pesaro (PU) 61122 | T+39 0721.400791 F+39 0721.26385 info@eme-srl.com | www.eme-srl.com

