



PULSWAVE PLUS

DEVICE FOR SHOCKWAVE THERAPY





THE NEW FRONTIER OF **SHOCKWAVE THERAPY**

Since 1986 Mectronic has been designing and manufacturing devices for instrumental physiotherapy and with **over 23000 medical devices produced, the company has ensured its leadership in terms of know-how and experience in the sector.**

The experience gained over the years, continuous research and direct contact with therapists and physicians has allowed Mectronic to introduce cutting-edge tools on the market, both in terms of performance and method of use.

Thanks to continuous technological and therapeutic research, Mectronic presents **PulsWave PLUS**, the shockwave device based on electromagnetic technology: a non-invasive and extremely efficient therapy that covers numerous pathological situations.

PulsWave PLUS is a light, compact and easy to carry device.

PulsWave PLUS generates shock waves with adjustable intensity, frequency and modulation in order to maximize therapeutic effects, obtain various biological effects and ensure faster pain relief and quick recovery from a wide range of acute and chronic diseases.

Thanks to the innovative MagPulse electromagnetic generator, **PulsWave PLUS** generates up to 5.000.000 guaranteed shots, becoming one of the longest-lasting devices on the market.

TECHNOLOGICAL **KNOW-HOW**



10
PATENTS



67
COUNTRIES



23.000
DEVICES PRODUCED

With more than 40 years of experience Mectronic is one of the main European manufacturers of physiotherapy equipment and medical lasers, as well as partner of numerous and important universities and research centers.

The continuous technological innovation, constant scientific research and collaborations with leading industry experts, have guaranteed Mectronic safe and innovative therapies for the physical recovery of the patient.

40 YEARS OF INNOVATION

1982

MECTRONIC IS FOUNDED

Engineer Gian Carlo Aloisini founds Mectronic together with other partners.



1985

THE FIRST SCANNER LASER

Mectronic designs and builds the first Scanner Laser available in four different configurations: He-Ne, GaAs, CO₂ and Nd:Yag.



1997

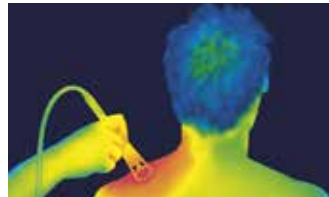
FP3 SYSTEM

Mectronic designs, patents and produces the world's first three-wavelength semiconductor laser (FP3 System).

2007

TEMPERATURE CONTROL

Mectronic patents the first system to measure, process and monitor skin temperature during treatments.



2009

E²C: PATENTED STOCHASTIC EMISSION

Mectronic creates and patents the innovative stochastic emission mode with low thermal impact that generates laser pulses which vary in terms of duration and intensity.

2015

PULSWAVE

Mectronic presents PulsWave, the new frontier of shockwave therapy, featuring the innovative Swing mode for multi-frequency treatment.



2020

NEW PRODUCTS

Mectronic presents the new range of products for shockwave therapy, laser therapy, Tecar therapy and Chelt Therapy.



1984

THE FIRST LASER

Design and production of the first super-pulsed semiconductor laser system.



1986

THE FIRST THERAPEUTIC ND:YAG LASER IN THE WORLD

Mectronic designs the first Nd:Yag laser in the world with continuous emission for physical therapy. High-power laser therapy is born.



2005

MORE THAN 3000 LASERS INSTALLED ALL OVER THE WORLD

Mectronic sold **3000** lasers worldwide.



2010

CHELT THERAPY

Chelt Therapy is born; a synergy between three-wavelength high-power laser therapy and dry cryotherapy at -35 °.



2017

THEAL THERAPY

Mectronic patents and presents the innovative THEAL THERAPY:

Temperature controlled
High
Energy
Adjustable
 multi-mode emission
Laser



YOUR PARTNER IN SPORTS

Whether it is prevention, injury treatments or physical performance improvement, Mectronic devices are available for the major medical and physiotherapy operators who take care of the professional athlete.

MECTRONIC MEDICALE IS THE OFFICIAL PARTNER OF:





WHY CHOOSE **PULSWAVE PLUS?**

PulsWave PLUS is the innovative shockwave therapy system, the result of over 40 years of experience gained in the sector.

TECHNOLOGY AND INNOVATION

PulsWave PLUS operates at pulsed frequencies from 1 to 25 Hz.

360 ° REHABILITATION

PulsWave PLUS offers a wide range of settings and customizations, an effective therapy for every need.

LIGHTNESS AND POWER

PulsWave PLUS emits shock waves in Continuous, Burst mode (adjustable from 2 to 90) and in the innovative Swing mode.

PRECISION AND RELIABILITY

PulsWave PLUS operates at energy levels from 50 mJ (<1 bar) to 200 mJ (> 5 bar), that can be accurately adjusted in steps of 10 mJ.

AN INTERACTIVE EXPERIENCE

The touch-screen guides the user through therapy management in a simple and intuitive way; effective from the very first use.

“Sara Loda, Italian volleyball player, spiker and captain of Volley Bergamo (Serie A1) during a treatment with PulseWave Plus”



ULTRA SOFT PULSE



INNOVATIVE SWING MODE



PROTOCOLS FOR PATHOLOGIES



THERAPY FOR EFFECTS



A WIDE POWER RANGE



**ELECTROMAGNETIC GENERATOR
MAGPULSE**



TISSUE TARGET SYSTEM





ULTRA SOFT PULSE TECHNOLOGY

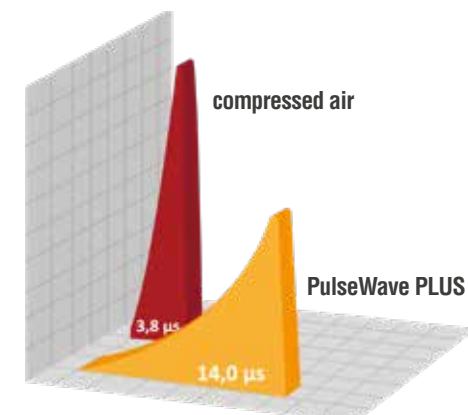


Less pain, same energy

PulsWave PLUS shockwave therapy generates unique and innovative high-energy acoustic waves using a projectile 5 times heavier than standard air-pressure systems and a reduced final speed upon contact with the applicator.

The longer pulse rise time generates the same energy, avoiding unpleasant pressure peaks. The lower pressure peak and the longer pulse rise time minimize the unpleasant sensation and the pain normally associated with this therapy.

The innovative Ultra Soft Pulse technology allows improving both performance and therapeutic compliance even at high energy levels.



SWING MODE



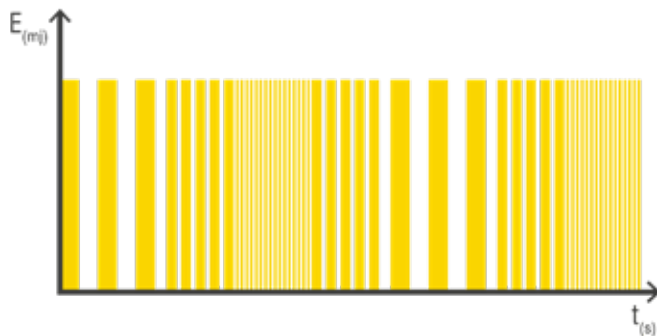
Radial shock waves are high-energy acoustic waves. The kinetic energy of the projectile created by the electromagnetic generator is transferred to the handpiece applicator and subsequently to the tissue.

The collision generates a shock wave that expands radially into the skin and the first underlying tissue layer. The energy of the pressure wave facilitates the repair and regeneration processes of bones, tendons and soft tissues.

Modulate therapy

The Swing mode allows performing a multi-frequency shockwave therapy treatment.

The user can set the start and the final frequency, the duration and the type of Swing mode. This technology makes **PulsWave PLUS** an even more powerful and flexible tool that accelerates tissue regeneration, relieves pain and restores mobility, by adapting and modulating the therapy according to the specific disease and patient.



TISSUE TARGET SYSTEM

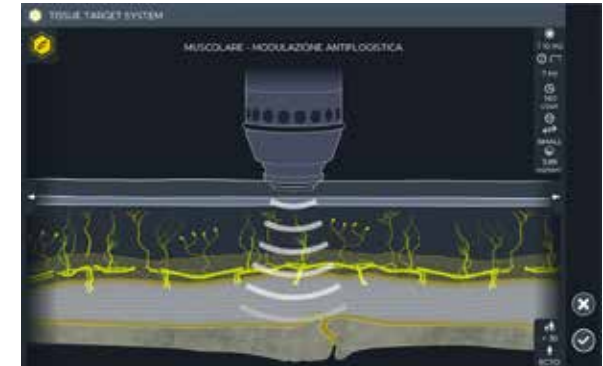


Maximize the effect on tissues

PulsWave PLUS features the innovative Tissue Target System that allows the operator to set the therapy according to the type of tissue to be treated, the desired effect and the characteristics of the patient.




In order to optimize therapy, the operator can select six different types of tissues: epithelial, bone, muscle, tendon-ligament, connective and nervous.

Different effects are available for each type of tissue, further optimized by setting the parameters corresponding to patient's characteristics, such as age and skin type.



The therapist receives a graphic feedback representing, by way of example, the treatment on the affected tissues.



-  EPITHELIAL
-  TENDON-LIGAMENT
-  BONE
-  CONNECTIVE
-  MUSCLE
-  NERVOUS

PROTOCOLS BY **PATHOLOGY**



Shockwave therapy allows treating various acute, subacute and chronic diseases: **PulsWave PLUS** offers a pathology library with over 90 pre-set protocols, and the ability to create customized protocols.

PATHOLOGY LIBRARY

The library includes numerous pathologies with relative interactive protocols, subdivided by phase. The new MecOS 5.0 software offers immediate graphic feedback, which displays energy, emission mode and number of shots generated by the device.

TREATMENT GUIDE

The pathology library includes a protocol dedicated to each pathology, both acute and chronic. Thanks to the 10.1" color screen, the therapist can use images that clearly show how to treat the patient.

CUSTOM PROTOCOLS

PulsWave PLUS allows creating customized protocols consisting of up to maximum 5 different phases.

It is possible to set energy, frequency, emission mode and number of shots, guaranteeing reliability and precision from the very first use.

EFFECT THERAPY



BIOSTIMULANT EFFECT

Shockwave therapy stimulates the fibroblast proliferation, thus producing collagen that helps rebalancing the extracellular matrix and remodeling the tissues.

ANALGESIC EFFECT

Featuring the innovative Swing emission mode and the possibility to emit ultra-soft high frequency pulses, the shockwave therapy allows modulating the energy by optimizing the interaction with the peripheral nervous system, in order to fight and quickly reduce muscle and articular pain, such as neuropathic pain.

ANTI-INFLAMMATORY EFFECT

Thanks to the deep biological stimulation of the tissues, shockwave therapy modulates inflammatory processes, triggering vasodilation, increasing the supply of oxygen to the affected tissues and activating the main metabolic processes.

ANTI-EDEMA EFFECT

Shockwave therapy stimulates the neoangiogenesis phenomenon in the tissues. The production of new vessels has a balancing effect in post-trauma and hemolymphatic peristalsis by restoring microcirculation and the collection of excess fluids produced by inflammatory phenomena.

CONTRACTURE-RELIEVING EFFECT

Shockwave therapy helps modulating the release of oxygen from oxygenated hemoglobin. The perfusion of oxygen in the contracted muscle tissues easily solves the topical problems of ischemia and hypoxia by favoring muscle fibers relaxation.



WIDE POWER RANGE



Performance without compromise

PulsWave PLUS, thanks to the innovative MAGPULSE system, generates pulses up to 25 Hz frequency with energy between 50 mJ and 200 mJ.

The wide range of frequencies and pulse energies ensures flexible, powerful and performing therapy.



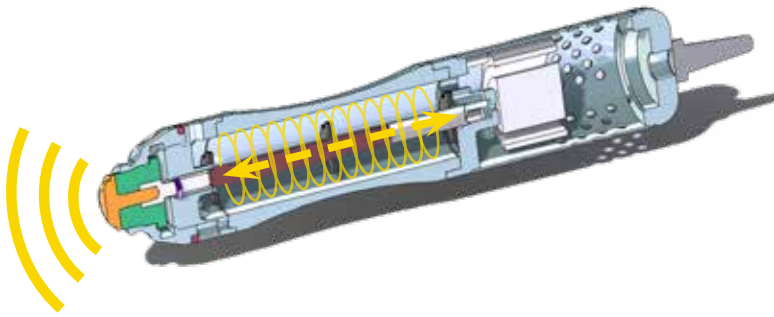
MAGPULSE

ELECTROMAGNETIC GENERATOR



5 million shots guaranteed

PulsWave PLUS features the advanced and innovative MAGPULSE electromagnetic generator with minimal eddy current.



MAGPULSE generates up to 5 million guaranteed shots, becoming one of the longest-lasting shockwave devices and allowing quick and safe return on investment.

MAGPULSE system allows generating Ultra Soft Pulse with high therapeutic compliance, frequency up to 25 Hz and maximum energy of 200 mJ.





PulsWave PLUS

TECHNICAL SPECIFICATIONS

SOFTWARE	Mectronic's own MecOS 5.0 Real-Time Operating System
SHOCKWAVE TECHNOLOGY	Shock wave device with electromagnetic generator
ENERGY LEVELS	From 50 mJ (< 1 bar) to 200 mJ (> 5 bar) in steps of 10 mJ
FREQUENCY	1-25 Hz (with all energy levels)
MODE	- Continuous - Burst - Swing

EFFECT MODES	<p>Protocols to maximize the main effects:</p> <ul style="list-style-type: none"> - Bio-stimulant - Anti-inflammatory - Contracture-relieving - Anti-edema - Analgesic
PROTOCOLS	<ul style="list-style-type: none"> - Over 90 pre-set protocols - Ability to create customized protocols
TISSUE TARGET SYSTEM	Ability to set the therapy according to the type of tissue to be treated, the desired effect and the characteristics of the patient
DISPLAY	10.1" HD IPS color display with capacitive touch screen
POWER SUPPLY	100÷240V 50-60Hz Fuses 2x2 AT
ABSORPTION	250 VA
OPERATING TEMPERATURE	<ul style="list-style-type: none"> - 0-30° C - Relative humidity: between 30 and 75% non-condensing - Pressure: between 700 and 1060 hPa
STORAGE AND TRANSPORT	<ul style="list-style-type: none"> - -10° ÷ 55° C - Relative humidity: between 10 and 100% non-condensing - Pressure: between 500 and 1060 hPa
IP CLASSIFICATION	<p>Device: IP Handpiece: IPX0 Pneumatic footswitch: IPX4</p>
SIZES	<ul style="list-style-type: none"> - CASE: 295 x 265 x 150 mm - WITH TROLLEY: 516 x 516 x 1017 mm
WEIGHT	<ul style="list-style-type: none"> - CASE: 4 Kg - WITH TROLLEY: 24 Kg - HANDPIECE: 0.9 Kg
CERTIFICATION	CE0051
WARRANTY	2 YEARS / 5.000.000 shots guaranteed*

*Prior evaluation carried out by our service center



"Francesca Marcon, Italian volleyball player, spiker of Volley Bergamo (Serie A1) during a treatment with PulseWave Plus"

ACCESSORIES INCLUDED



code 20AP.PW-P
PulsWave small applicator
Ø 6 mm



code 20AP.PW-M
PulsWave medium applicator
Ø 15 mm



code 20AP.PW-G
PulsWave large applicator
Ø 24 mm



Code 30CAP-B *
Biocompatible silicone cap
3 pcs



Trolley
code 30CL.PLS-S
Trolley for handpiece and accessories
516 x 516x 866 mm



Code 20MAN.PULSW
PulsWave handpiece
(no applicators)



Code 20PE.PNEUM
Pneumatic Footswitch



Code 20PE.PNEUM
Pneumatic Footswitch with metal base and PulsWave logo



Code 30WI.AL90.SCH
Power cord
with 90° Schuko plug

OPTIONAL ACCESSORIES



Code 30BO.F-MM
NYL Flex protective bag
For device transport



Code 30BO.R-MM
Rigid protective bag
For device transport



Code 50ME.PM-PW
PulsWave handpiece holder



Code 50WI.AL2MT.SCH
Power cord
With Schuko plug



Code 50WI.AL2MT-IT
Power cord
with Italian plug



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* the code refers to 1 unit



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MECTRONIC MEDICALE s.r.l.

via Orio al Serio 15,

24050 Grassobbio (BG) - ITALY

Tel: +39 035656080 | Fax: +39 035657361

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www.mectronicmedicale.com | info@mectronicmedicale.it