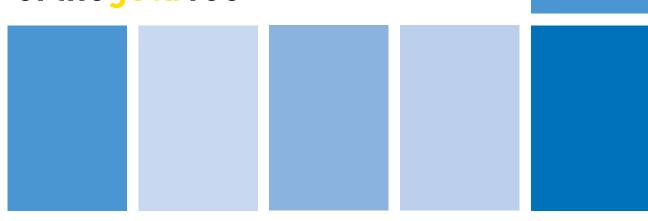




# SPARK WAVE® THERAPY EFFECTIVELY TREATING A WIDE RANGE OF ORTHOPAEDIC INDICATIONS

MUSCULOSKELETAL DISORDERS / ATHLETIC THERAPY / REHABILITATION

orthogold 100®



## orthogold100® – MTS SPARK WAVE® TECHNOLOGY

orthogold 100, MTS's premium and versatile therapy device for the treatment of a broad spectrum of musculoskeletal disorders including traumatology, athletics and rehabilitation. Intuitive operating technology, smart design and highly advanced MTS Spark Wave Technology guarantee shock wave therapy at its best.

Advanced Spark Wave Technology guarantees the most effective shock waves, consistently providing superior treatment quality and optimal treatment results.

An ergonomic touchscreen and touch wheel control panel, together with a selection of lightweight handheld applicators, ensure an easy operating experience for the user.

A compact design enables **orthogold 100** for portable use when mobility is required. Specially fabricated hardcases for safe and secure transfer of the device are available.





## SPARK WAVE® THERAPY FOR ORTHOPAEDIC INDICATIONS

#### Tissue regeneration with Spark Wave Therapy

Spark Waves promote sustainable regeneration of blood vessels and skin as well as of musculoskeletal and nervous tissues, which has been widely proven by comprehensive research and numerous clinical trials.

Spark Wave Therapy has a highly beneficial effect on most every kind of tissue. Cells that are treated with Spark Waves upregulate the expression of VEGF (vascular endothelial growth factor) and other growth factors, which activate neovascularisation, tissue remodelling and regeneration.

Additionally, the anti-inflammatory as well as the antibacterial effect of Spark Waves, in combination with various other biological regeneration processes, support the natural self-healing of the diseased tissue.

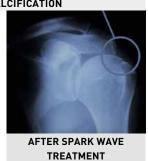
The efficacy of Spark Wave Therapy has been thoroughly proven in clinical studies and state-of-theart research has demonstrated its curative effects on orthopaedic indications.

### Treatment with orthogold 100 stimulates healing processes at the cellular level:

- Activating endogenous growth factors (e.g. BNDF, BMP, FGF-2, IGF-1, NO, PCNA, PLGF, TGF-ß, VEGFs)
- Inducing stem cell proliferation and migration
- Stimulating neovascularisation and angiogenesis
- Enhancing blood circulation and cell metabolism
- Reducing cell apoptosis and tissue necrosis
- Acting anti-inflammatory and antibacterial
- Stimulating the catabolism and the natural anabolic growth function of tissues (blood and lymphatic vessels, skin, connective tissue, bones, cartilage, tendons, joints, smooth and striated muscles, nerves ...)
- Promoting tissue remodelling and regeneration







SPARK WAVE TREATMENT OF A HEEL SPUR





### Practical selection of applicators for optimal treatment results

orthogold100 utilizes two specially designed applicators, each to treat a specific set of orthopedic indications. All MTS applicators feature MTS's highly sophisticated SmarTrode® technology, which provides consistent Spark Wave performance quality.

Applicators are easily interchangeable with the device and offer the user an economical and practice-oriented treatment.

#### Soft-focused applicator OE035

Perfectly suited for the treatment of

> Myofascial trigger point syndrome

#### Focused applicator OE050

Perfectly suited for the treatment of

- Impingement syndrome with or without tendinosis calcarea (calcifying tendinitis)
- Epicondylitis humeri radialis and ulnaris (tennis elbow)
- > Plantar fasciitis and heel spur
- > Patella tendon syndrome
- Pseudarthosis in small bones (also infected and in the chronic state)
- Achillodynia

- Safe and effective therapy system for regenerative medicine
- Effective treatment of acute or chronic tendinopathies and musculoskeletal disorders
- Increases muscle resilience and performance capacity
- Promotes wound healing
- Non-invasive, tissue-conserving, painless and highly efficient method to enhance musculoskeletal tissue remodelling and regeneration
- Activates the metabolism and proliferation of progenitor cells
- Improves blood circulation and tissue perfusion
- Regenerative and anabolic action
- Anti-inflammatory and antibacterial effect
- Analgesic power
- · User-friendly and patient-convenient
- Premium MTS Spark Wave® Technology





## orthogold 100®

#### **TECHNICAL DATA**

Dimensions: 21.8 x 40 x 45.9 cm

Weight:

Power Supply: 100 - 240 VAC, 50 - 60 Hz

200 VAC Power Input: Frequency: 0.5 - 8 Hz

Applicator OE035 soft-focused

Max. Penetration Depth (- 6 dB): 60 mm Max. Penetration Depth (5 MPa): 86 mm

Energy Flux Density (EFD): 0.005 - 0.135 mJ / mm<sup>2</sup>

Acoustic Pulse Energy (E<sub>total</sub> / - 6 dB): 0.34 - 4.22 mJ Acoustic Pulse Energy (E<sub>total</sub> / 5 MPa): 0.35 - 12.10 mJ

Applicator OE050 focused

Max. Penetration Depth (- 6 dB): 49 mm Max. Penetration Depth (5 MPa): 60 mm

Energy Flux Density (EFD): 0.03 - 0.27 mJ / mm<sup>2</sup>

Acoustic Pulse Energy ( $E_{total}$  / - 6 dB): 0.30 - 6.15 mJ Acoustic Pulse Energy ( $E_{total}$  / 5 MPa): 0.61 - 19.50 mJ

MTS Medical specialises in the research, development and manufacturing of Spark Wave® Therapy systems. Our therapy systems are successfully used worldwide in the healthcare fields of orthopaedics, physiotherapy, traumatology, urology, wound care and aesthetics. MTS therapy systems utilize MTS's own patented Spark Wave® Technology, which guarantees the most effective shock waves for pain-free, high quality treatment as well as quick and excellent treatment results.

Let yourself be convinced by the Spark of Evidence.



#### MTS Medical UG

Robert-Bosch-Str. 18 D-78467 Konstanz +49 (0) 7531 36185-0 sales@mts-medical.com www.mts-medical.com www.mts-science.com



