

### SPARK WAVE® THERAPY

### EFFECTIVELY TREATING A WIDE RANGE OF ORTHOPAEDIC INDICATIONS

TRAUMATOLOGY / SPORTS MEDICINE / MUSCULOSKELETAL DISORDERS

## orthogold 280®



## orthogold 280<sup>®</sup> – MTS SPARK WAVE<sup>®</sup> TECHNOLOGY

orthogold280, MTS's versatile and highly successful therapy system specially developed for orthopaedic, traumatologic and sports medicine treatment facilities. 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 easy operating experience is ensured for the user with a convenient handheld touch panel control unit and a flexible adjusting applicator head.

Precise targeting of the focus is performed via laser pointer, X-ray, ultrasound targeting or feedback from the patient.

Compact design and a sturdy wheel base enable easy mobility of the **orthogold280** within treatment facilities.





# **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, initiate the natural self-healing of the diseased tissue.

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

### Treatment with orthogold280 stimulates healing processes at the cellular level:

- Activating endogenous growth factors (e. g. BNDF, BMP, FGF-2, IGF-1, NO, PCNA, PLGF, TGF-B, 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

#### Optimal performance with the applicator OW280

**orthogold280** has an exceptionally large operation radius and utilizes a specially designed applicator to treat a wide range of orthopaedic indications.

#### MULTIPLE LOWER LEG FRACTURES



BEFORE SPARK WAVE TREATMENT

AFTER SPARK WAVE

The applicator OW280 features MTS's highly sophisticated SmarTrode® technology, which provides consistent Spark Wave performance quality. Its deep therapeutic penetration depth makes it capable for low as well as high energy applications.

Perfectly suited for the treatment of

- Impingement syndrome with or without tendinitis calcarea
- > Epicondylitis humeri radialis and ulnaris
- > Plantar fasciitis and heel spur
- > Patella tendon syndrome
- Pseudarthrosis (also infected in the chronic state)
- › Achillodynia
- > Avascular bone necrosis

The **orthogold280** shows great efficiency in the clinical practice and represents a safe and cost-effective alternative to traumatic surgery.





#### Benefits of orthogold280® at a glance

- Safe and effective therapy system for regenerative medicine
- Effective treatment of acute or chronic tendinopathies and
- musculoskeletal disordersIncreases 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
- User-friendly and patient-convenient
- Premium MTS Spark Wave® Technology





## orthogold280®

#### **TECHNICAL DATA**

Dimensions: Weight: Power Supply: Power Input: Frequency:	915 x 670 x 990 mm 182 kg 230 VAC / 50 Hz or 115 VAC / 60 Hz 500 VAC 1 - 5 Hz
<b>Applicator 280</b> Therapeutic Focus fz (- 6 dB): Energy Flux Density (EFD): Focus Energy (E <sub>total</sub> / - 6 dB):	0 - 75 mm 0.02 – 1.80 mJ / mm² 0.1 – 41 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.



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