

SPARK WAVE® LITHOTRIPSY

**EFFICIENTLY AND SAFELY TREATING URINARY
AND ORTHOPAEDIC INDICATIONS**

STONE DISEASES / TRAUMATOLOGY / MUSCULOSKELETAL DISORDERS

lithogold380®

lithogold380[®] – SPARK WAVE[®] TECHNOLOGY

lithogold380, MTS's premium and versatile therapy system specially developed for kidney friendly lithotripsy and orthopaedic treatment. 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.

Precise targeting of the focus is optionally performed via X-ray or ultrasound targeting.

Compact design and a sturdy wheel base enable easy mobility of the **lithogold380** within treatment facilities.

Optional equipment such as lithotripsy table, ultrasound targeting system, C-arm and C-arm docking system are available.



kidney friendly

SPARK WAVE® LITHOTRIPSY FOR URINARY STONE DISEASES AND ORTHOPAEDIC CONDITIONS

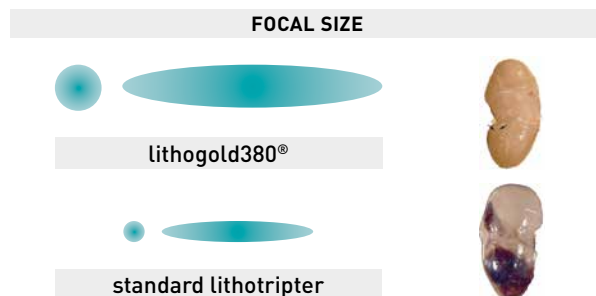
SPARK WAVE® LITHOTRIPSY

Spark Wave Lithotripsy provides optimized shock wave dynamics. The unique large focal zone completely surrounds the calculus and generates a squeezing effect that effectively pulverizes the stone and maximizes fragmentation efficiency.

Additionally, the low pressure and the short pulses verifiably prevent tissue damage and undesirable side-effects like hematoma and renal colics. The safety and efficiency of Spark Wave Lithotripsy has been widely proven by comprehensive studies and numerous clinical trials.

Successful treatment with **lithogold380**:

- Improves stone fragmentation rate through squeezing effect
- Provides a high therapeutic penetration depth
- Reduces re-treatment rates to less than 7 %
- Requires minimal anesthesia
- Increases efficiency by its unique large focal volume
- Prevents unintended side-effects



Strong performance of the applicator LG380 for optimal treatment results

The specially designed LG380 applicator has an exceptionally large focal zone (20 x 101 mm) and a low, tissue-conserving, peak energy of < 36.9 MPa to treat lithotriptic indications.

The high penetration depth (165 mm) increases treatment efficiency and allows application in corpulent patients as well.

The LG380 applicator features MTS's highly sophisticated SmarTrode® technology, which provides consistent Spark Wave performance quality. The SmarTrode is easily interchangeable in about 30 seconds.

Perfectly suited for the treatment of

- > Renal stones
- > Ureteral stones

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.

Treatment with **lithogold380** stimulates healing processes at the cellular level:

- Activating endogenous growth factors (e. g. BDNF, BMP, FGF-2, IGF-1, NO, PCNA, PLGF, TGF-β, 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 (skin, bones, tendons, joints, muscles, nerves...)
- Promoting tissue remodelling and regeneration

Optimal performance of the applicator LG380

The LG380 applicator is also approved to treat a wide range of orthopaedic indications.

The LG380 applicator features MTS's highly sophisticated SmarTrode® technology, which provides consistent Spark Wave performance quality. It is capable for low as well as high energy applications and has a deep therapeutic penetration depth, especially for use on large bones and hip joints.

Perfectly suited for the treatment of

- > Impingement syndrome with or without tendinosis calcarea (calcifying tendinitis)
- > Plantar fasciitis / heel spur
- > Pseudarthrosis (also infected in the chronic state)
- > Avascular bone necrosis
- > Stress fractures
- > Osteochondrosis dissecans
- > Greater trochanteric pain syndrome

Benefits of lithogold380® at a glance

- Premium multi purpose therapy system for lithotripsy and orthopaedic indications
- Safe and powerful lithotripter
- Tissue-conserving, non-invasive and efficient therapy to treat urinary stones
- Maximal fragmentation efficiency through squeezing effect
- Minimal tissue-damage and side-effects by low peak pressure and short pulses
- Deep therapeutic penetration depth
- Requires minimal anaesthesia
- High-end therapy system for regenerative medicine and orthopaedic indications
- Effective treatment of acute or chronic musculoskeletal disorders
- User-friendly and patient-convenient
- Premium MTS Spark Wave® Technology



lithogold380®

TECHNICAL DATA



Dimensions:	1130 x 1580 x 1500 mm
Weight:	234 kg
Power Input:	230 VAC / 50 Hz 115 VAC / 60 Hz

Lithotripter

Therapeutic Focus:	20 x 101 mm
Penetration Depth:	0 - 165 mm
Pressure Range:	24 - 36.9 MPa
Total Energy (E_{total} / - 6 dB):	2.86 - 20.70 mJ
Frequency:	1, 1.5, 2 Hz, ECG trigger

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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MADE IN



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