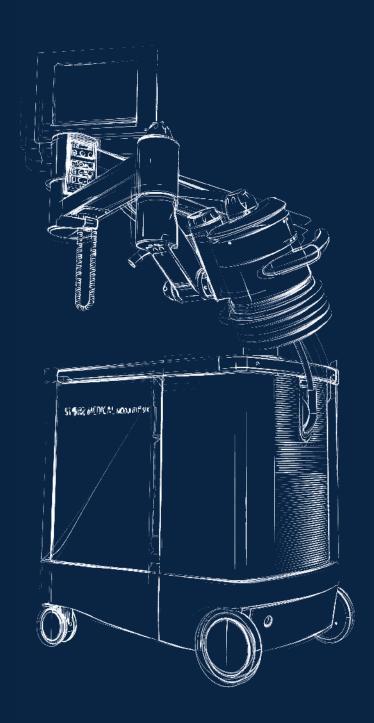
MODULITH® SLK MODULAR FLEXIBILITY

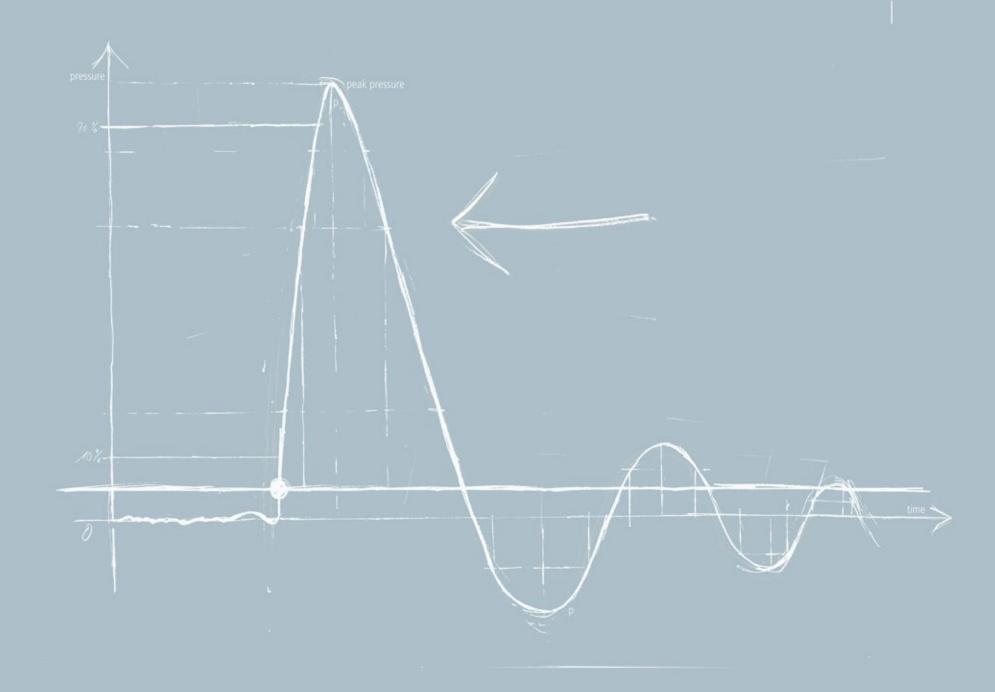




## Non-invasive therapy in the service of people

Established in 1987, STORZ MEDICAL AG is a Swiss member company of the KARL STORZ Group. From our headquarters in Tägerwilen, on the Swiss side of Lake Constance right in the heart of Europe, we develop innovative shock wave systems that meet the highest standards of precision. Medical specialists and patients all over the world know they can rely on the experience and expertise of STORZ MEDICAL.

As a reliable partner of doctors, we are committed to making a vital contribution to medical progress in the service of new therapy methods.



## **Physics**

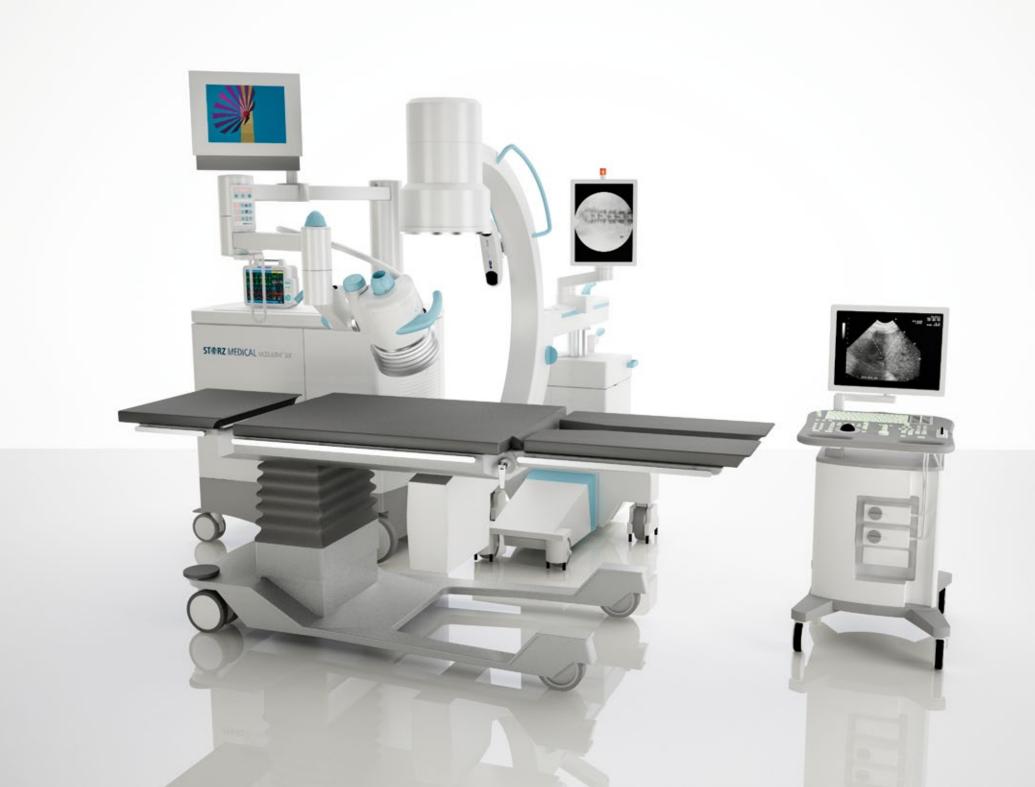
The therapy source is the core component of any lithotripter. It determines not only the stone disintegration efficiency, but also the localization systems that can be integrated into the lithotripter.

Shock waves are extremely short pressure pulses with peak pressures between approx. 10 and over 150 MPa. This is equivalent to 100-1500 times the atmospheric pressure.

This form of acoustic energy can be introduced into the body without any significant side effects to effectively disintegrate minimally elastic structures such as kidney stones.



The peak pressures are up to 150 MPa.



### **MODULITH® SLK – modular flexibility**

The MODULITH® SLK is based on an innovative new design: it features a medium-sized shock wave source that is mounted to a flexible, easy-to-move articulated arm and offers a wide energy range for all indications of shock wave therapy.

Thanks to its exceptional flexibility, the MODULITH® SLK is also ideal for interdisciplinary use. Shock wave therapy spans a wide spectrum of applications, from urology and orthopaedics up to stone disintegration in gastroenterology and ENT medicine.

The system components can be chosen from a variety of brands and models according to specific hospital requirements. Since individual components can also be used independently, the MODULITH® SLK is an investment that provides rapid pay-off even if the number of SWL treatments performed is relatively low.

- Unequalled cylindrical shock wave source
- Highly flexible therapy head
- Dual imaging (simultaneous X-ray and ultrasound)
- Lithotrack® targeting system the innovative solution for high-precision localization
- Modular set-up individual system configuration
- Maximum application and configuration flexibility



## A device for the entire spectrum of shock wave application

The MODULITH® SLK is the only lithotripter on the market allowing the treatment of all shock wave indications. The large dynamic range of the STORZ MEDICAL cylindrical source offers the perfect choice of energy level for any indication, from gentle treatment in pain therapy to efficient fragmentation of ureteral stones.

Due to the flexible therapy head and the combination of localization methods treatments from head to toe are possible. The unmatched Lithotrack® system is not only essential for urological stone therapy, non-unions and calcified shoulders can be localized with X-ray and treated from the »optimal« coupling angle. The dual localization with ultrasound and X-ray enables a perfect control throughout the SWL treatment. X-ray negative kidney stones or gallstones can be located easily and intuitively with the in-line ultrasound.

The in-line ultrasound detection with a 7.5 MHz transducer allows accurate focusing on near-surface therapy areas such as salivary stones or heel spurs.

All treatments can be performed with the patient in a comfortable position, salivary stones or orthopaedics indications may be treated in a sitting position.

Applications in the urological pain therapy as CPPS and PD, can be performed quickly and simply without any modification of the device.

Urology

Gastroenterology

Orthopaedics

ENT



## **System concept**

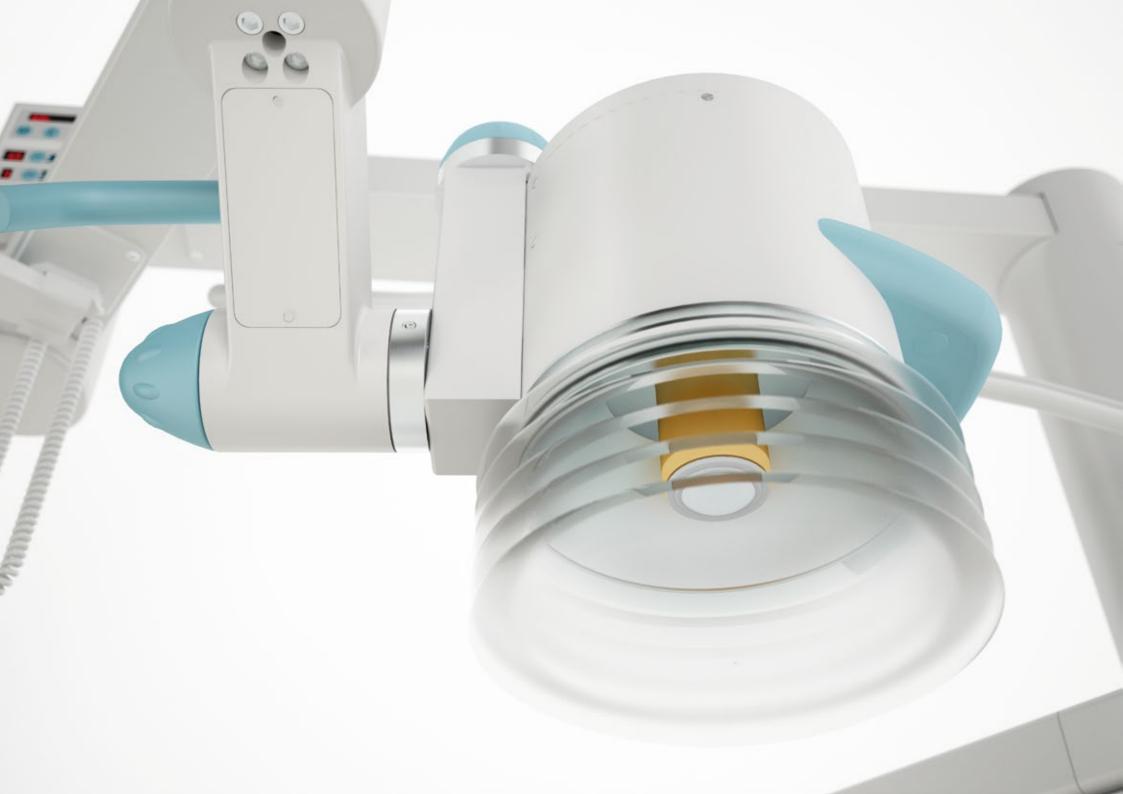
The medium-sized shock wave source is mounted to a flexible therapy arm and enables easy and intuitive positioning. The therapy head can be adjusted directly in treatment position according to the patient's specific anatomy.

- Unique therapy arm offers maximum flexibility and precision
- Treatment possible from »head to toe«
- Fine adjustment features for optimum adjustment of therapy region
- Therapy head can be moved into space-saving parking position









#### **Shock wave source**

With its patented cylindrical source, STORZ MEDICAL has developed a proprietary shock wave generator for exclusive use in all STORZ MEDICAL shock wave systems.

The shock wave source offers an energy range hitherto unequalled in the world of shock wave technology. It is thus possible to select exactly the right energy level for every indication – from pain therapy in orthopaedics up to the treatment of ureter stones or pseudarthrosis in surgery.

Offering a penetration depth of between 0 and 150 mm, the MODU-LITH® SLK is well prepared to tackle any challenge in daily clinical practice.

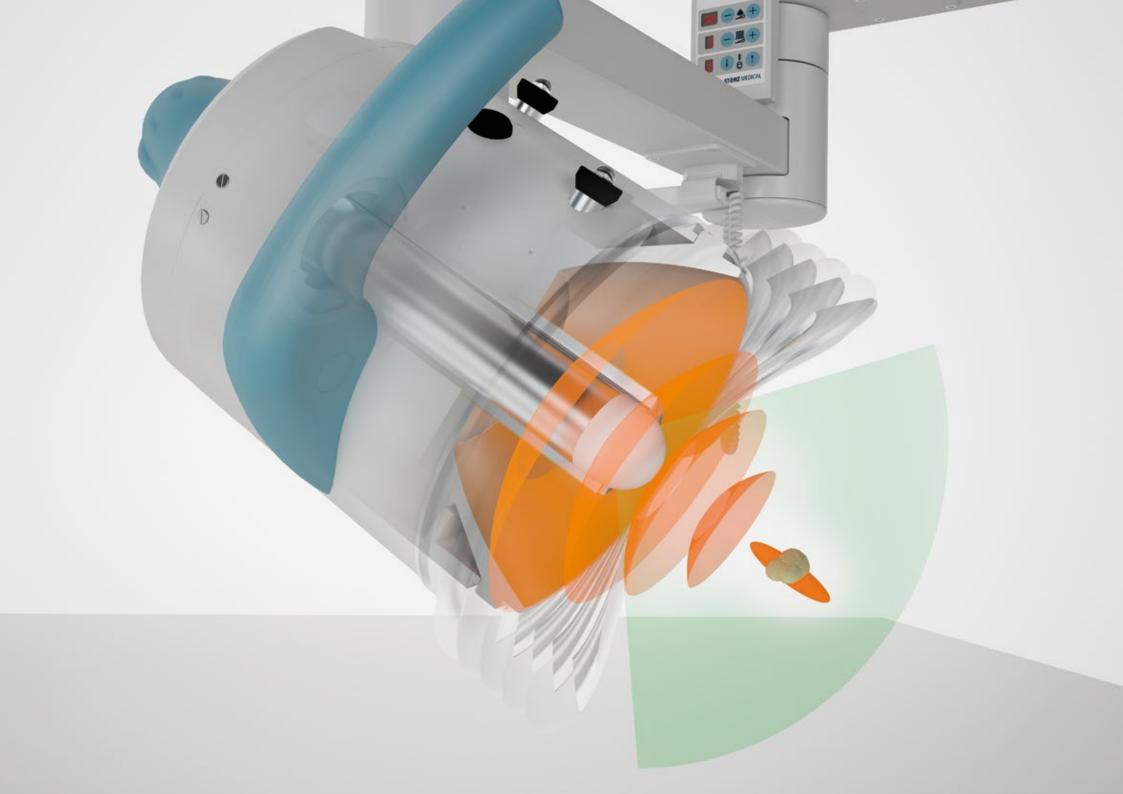
The STORZ MEDICAL cylindrical source is designed to enable in-line localization. It features a central opening, which is ideal for the installation of an in-line ultrasound transducer.

- Flexible and efficient
- Large energy range for all indications
- High penetration depth
- Large coupling surface for almost painless therapy
- In-line ultrasound option by design

## High energy

Ureteral stones
Pseudarthrosis
Biliary stones
Kidney stones
Salivary stones
Tendinosis
Peyronie's diseas

Low energy



### **Ultrasound localization**

Thanks to the flexible therapy head with in-line ultrasound option, the stone/target area can be localized as with a hand-held transducer. This enables easy adjustment of an optimum »entrance window« and allows bone interference to be avoided.

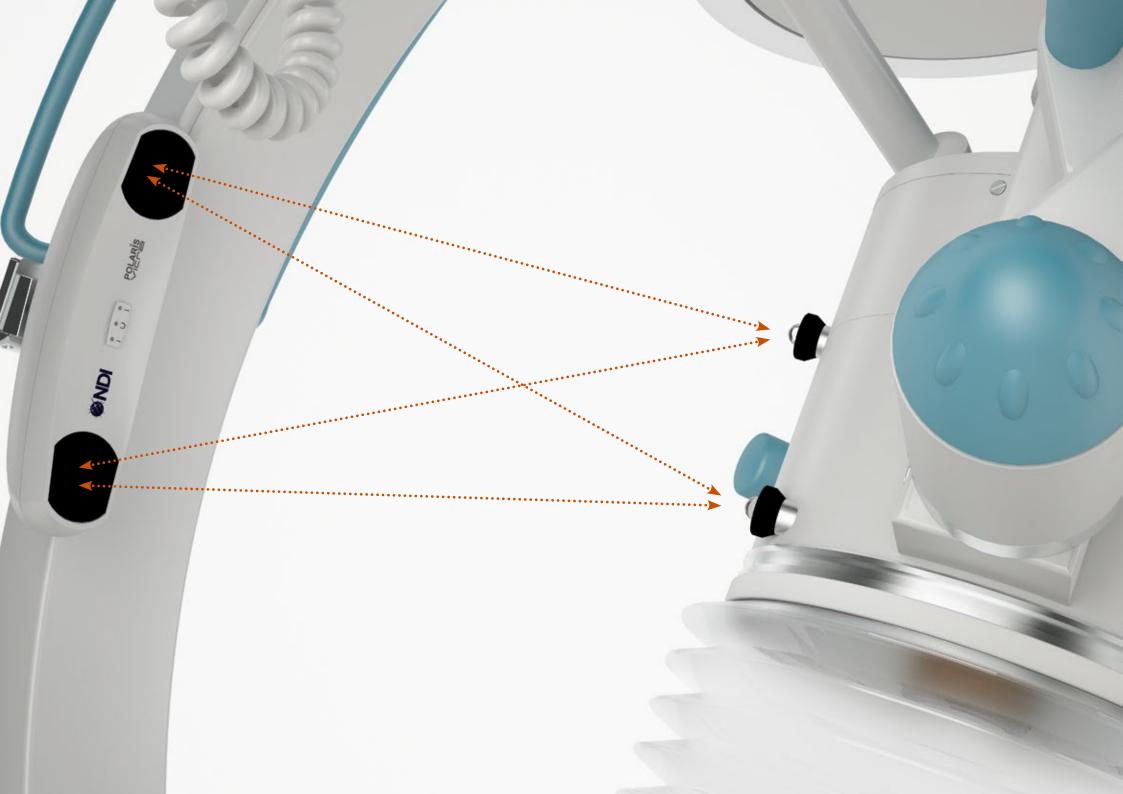
The MODULITH® SLK can be combined with various ultrasound devices to meet the most diverse requirements, from compact black/white tabletop units up to high-end colour Doppler ultrasound systems.

- In-line ultrasound transducer
- Maximum precision
- Intuitive stone localization
- No special SWL table required







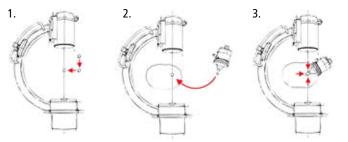


## X-ray localization/Lithotrack® targeting system

The MODULITH® SLK also offers maximum flexibility in X-ray localization. Thanks to the Lithotrack® targeting system, the therapy head position can be adjusted to the patient's specific anatomy. Mechanical connections are not required, so therapy head mobility is not hindered.

The stereoscopic camera »looks« at the therapy head and can determine its position and orientation in space. The resulting data is visualized in a virtual 3D scenario allowing the attending physician to position the therapy head easily.

The Lithotrack® targeting system allows surgical C-arcs from various manufacturers to be used for X-ray localization.



- Flexible therapy head positioning
- Instant detection of positioning errors
- No awkward mechanical connections
- Unique patented technology









# **Modular set-up**

The individual modules of the MODULITH® SLK therapy system can be used independently for diagnostic and therapeutic applications. This possibility ensures rapid pay-off of your investment.

- Patient table, C-arc and ultrasound device can be used independently
- Simple connection to therapy system
- No time-consuming mechanical connections





# **Mobile lithotripsy**

The MODULITH® SLK is the ideal solution for providers of mobile lithotripsy. The compact system modules can be easily moved by hand to ensure simple transport.

- The MODULITH® SLK can be easily secured in the van.
- The complete therapy system fits into a 3.5 tonne van.
- Compact component design for easy transport.







#### **Service worldwide**

Medical specialists all over the world benefit from our experience using systems developed by STORZ MEDICAL AG.

Based in Tägerwilen/Switzerland, the company operates around the globe through its branch offices and partners, making sure that qualified service personnel is always near at hand.

## **Co-operation**

Complex technology only provides optimum benefits if the user knows how to make most of it. Our training concepts are tailored to the interaction between doctors, systems and patients. We provide on-the-spot training making sure that our systems can be efficiently operated right from the very start.

You can also rely on our assistance and support in the development of new application methods. After all, it is your know-how and your ideas that pave the way for the further development of a leading technology.





