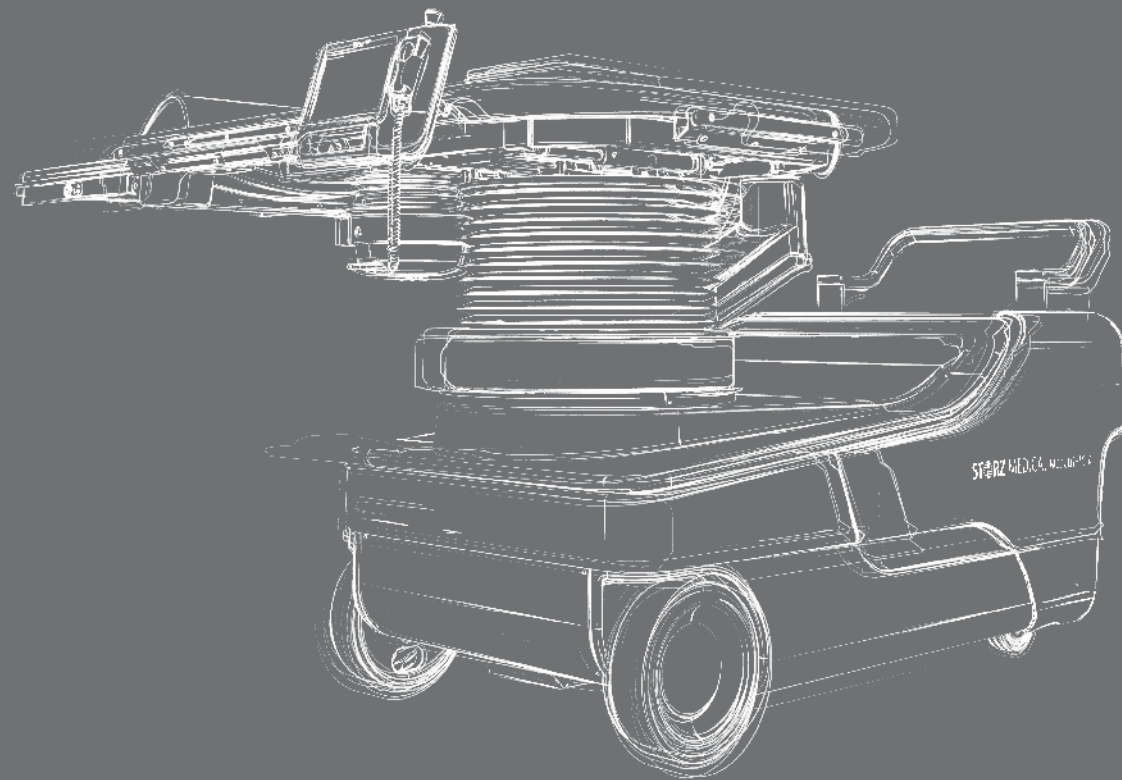


**MODULITH® SLK inline**  
**THE INNOVATIVE SOLUTION**



**STORZ MEDICAL**



STORZ MEDICAL MOBILE

## Urology with a fine medical tradition

STORZ MEDICAL AG is a Swiss member company of the KARL STORZ Group, established in 1945. Our products have proved their efficacy all over the world in the medical disciplines of urology, orthopaedics, sports medicine, rehabilitation, gastroenterology, cardiology and dermatology.

Close co-operation with leading urological institutes in the United States, Sweden, Great Britain and Germany has enabled us to develop a pioneering lithotripter that sets new standards in the management of stones in the urinary tract.

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## Cylindrical source

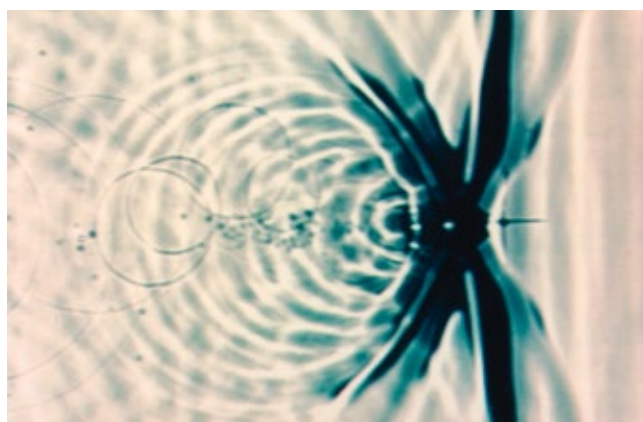
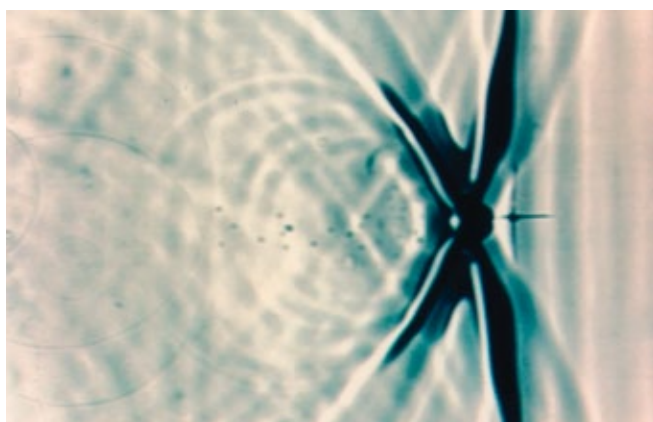
The therapy source is the core component of any lithotripter. It determines not only the stone fragmentation efficiency, but also the localization systems that can be integrated into the lithotripter solution.

The cylindrical coil in the pioneering therapy source of any STORZ MEDICAL lithotripter combines shock wave generation and in-line localization by design. Thanks to this specific geometry, in-line imaging can be easily done by ultrasound or X-ray fluoroscopy.

The therapy source offers an energy range hitherto unequalled in the world of shock wave technology. A total of 26 different energy levels are available so that the ideal shock wave intensity can be selected for each individual application.

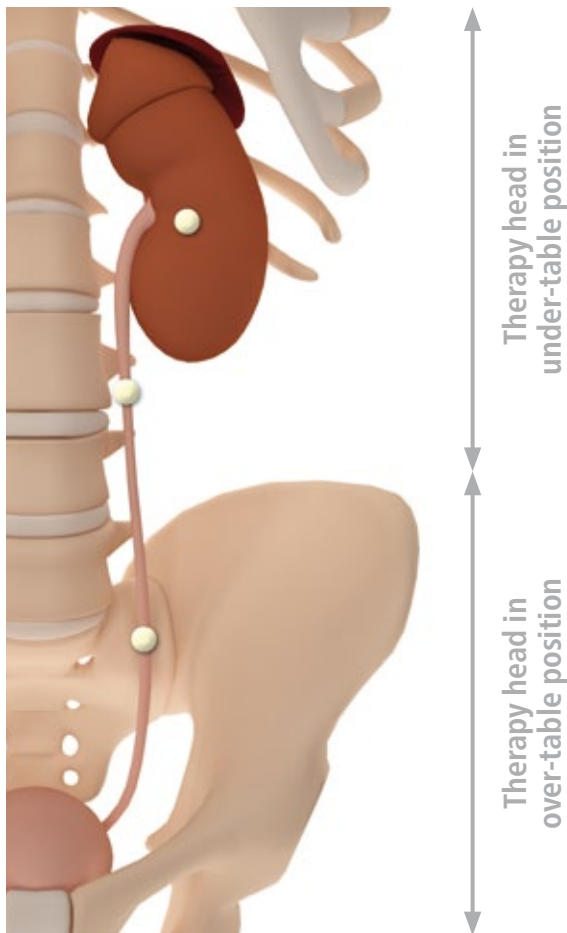
The 178 mm diameter of the therapy head aperture produces a coupling area as large as about 250 cm<sup>2</sup>, so that the energy density at the skin entry site is very low. This reduces pain and minimises the need for analgesics.

- High fragmentation efficiency
- Minimum side effects
- Lower pain sensation
- Constant energy output
- Long service life
- Low operating cost





## Treatment flexibility

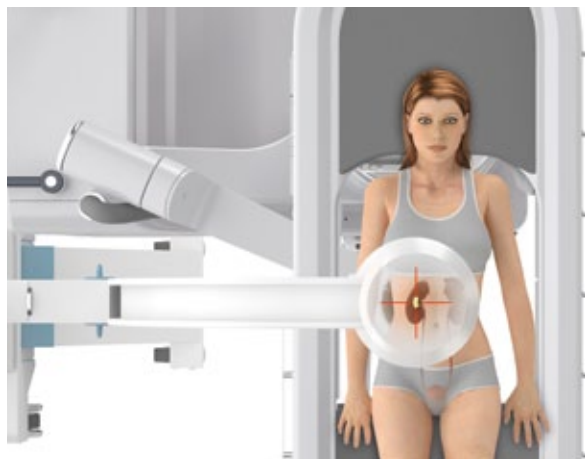


The MODULITH® SLK enables simple and effective shock wave lithotripsy (SWL) of all types of stones throughout the urinary tract. Exceptional treatment flexibility is guaranteed by the innovative therapy head which features automatic movement into over-table or under-table position, depending on the location of the calculus to be fragmented. The cylindrical coil in the unique STORZ MEDICAL therapy source combines shock wave generation and in-line localization by design. The generous adjustment range of the patient table ensures that stones on the left or right side of the patient's body, from the kidneys down to the ureter, can

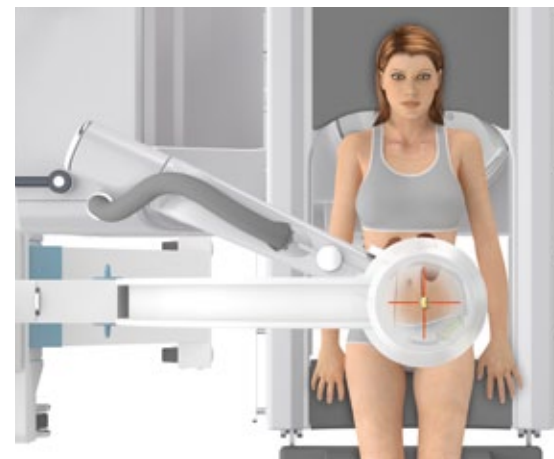
be treated without requiring any patient repositioning. The patient's position on the patient table remains the same for all shock wave lithotripsy applications or transurethral procedures, making treatment planning and preparation much easier for anaesthetists and nursing staff.

- Localization always in-line
- Therapy head in over-table and under-table position
- SWL adapted to stone position
- No patient repositioning required

Therapy head in under-table position:  
urinary stones in the kidney and proximal ureter



Therapy head in over-table position:  
urinary stones in the distal ureter and bladder







## Ultrasound localization

The cylindrical design of the STORZ MEDICAL therapy source enables easy installation of the ultrasound probe in the centre of the therapy head. As a result, the calculus shown in the ultrasound image is displayed on the central therapy head axis.

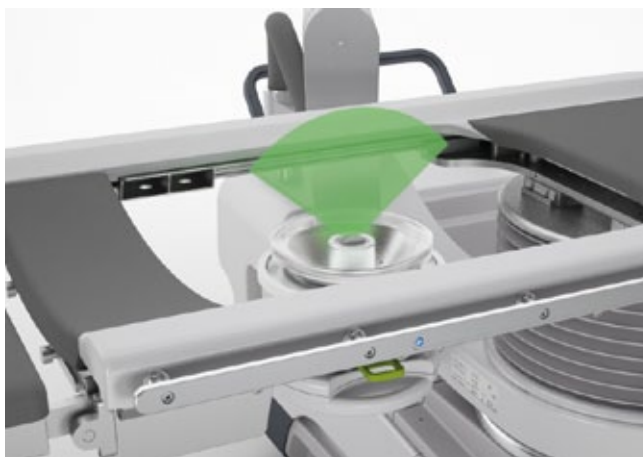
This in-line arrangement ensures that obstacles such as ribs or the iliac wing are directly visible in the ultrasound image. Moreover, sensitive regions such as the lungs, heart or gas-filled organs can be reliably identified and by-passed during shock wave application. This allows even children to be treated with maximum care and without any significant risks.

## In-line localization for maximum precision

The in-line configuration of the ultrasound probe ensures that shock waves and ultrasound waves pass through the same tissue regions, with only minimal deviations between them. The fact that the localized target area coincides with the shock wave focus provides maximum aiming accuracy and fragmentation efficiency.

The »snap-in technology« enables simple and precise placement of the in-line ultrasound probe whenever it is needed. The in-line ultrasound image displays the degree of stone fragmentation and clearly shows whether the calculus is still located in the shock wave focus. Unparalleled reliability and precision during localization and treatment are thus guaranteed.

- In-line ultrasound for exceptional aiming accuracy
- In-situ monitoring of stone localization
- Perfect control of shock wave path





## In-line X-ray localization

Fluoroscopic localization in vertical (posterior-anterior) direction through the central therapy head aperture ensures clear orientation regardless of whether the therapy head is in over-table or under-table position. This proven modality of in-line X-ray localization guarantees reliable stone positioning in the shock wave focus.

Localization results are further enhanced by the use of a central airbag which removes water from the X-ray path to eliminate artefacts in the X-ray image of the target area.

The MODULITH® SLK can be combined with any type of C-arc because no mechanical link between lithotripter and C-arc is required. Thanks to the built-in focal gauge and cross hairs, the system can be set up for operation within minutes. Motorized C-arcs can be used to turn the system into a fully integrated remote control workstation.

- High-precision stone localization
- Airbag for excellent image quality
- In-line X-ray localization

Therapy head in under-table position with in-line X-ray localization: urinary stones in the kidney and proximal ureter



Therapy head in over-table position with in-line X-ray localization: urinary stones in the distal ureter and bladder



STORZ MEDICAL

Settings



3000

SW

110.0

SMLI



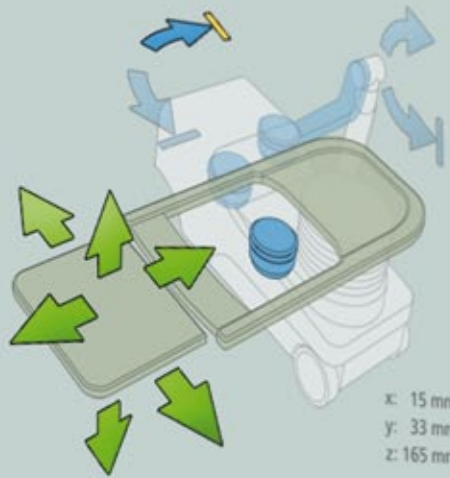
8.5

Energy Level



1.5

Frequency (Hz)



x: 15 mm  
y: 33 mm  
z: 165 mm

Therapy Head

Cushion



5

Cushion Pressure



Airbag



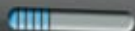
Evacuation Mode

Table Positions

Ultrasound



18.03.2011 10:15



## Intuitive touch screen control

The new touch screen control panel can be positioned close to the C-arc controls or on a rail fitted to the patient table, depending on the specific treatment requirements. The integrated concept keeps all important controls for positioning, shock wave release and safety always at hand in a compact console.

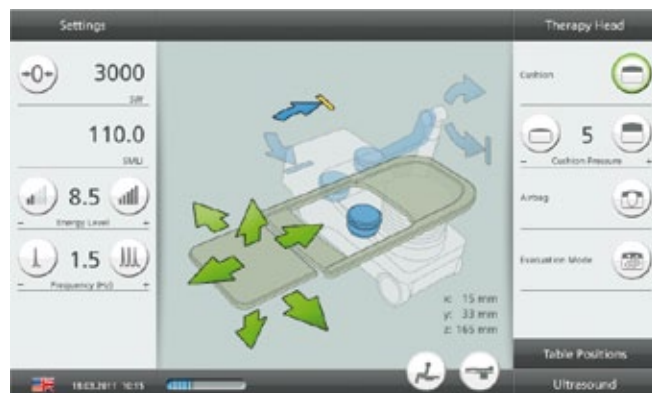
Operation of the MODULITH® SLK is intuitive and simple, which translates into a short learning curve. All important functions are available at your fingertips and are easily distinguishable by their symbol and layout.

The treatment relevant shock wave parameters are permanently visible. The scrolling side menu shows the controls needed for the currently performed procedure keeping the user interface tidy and clear.

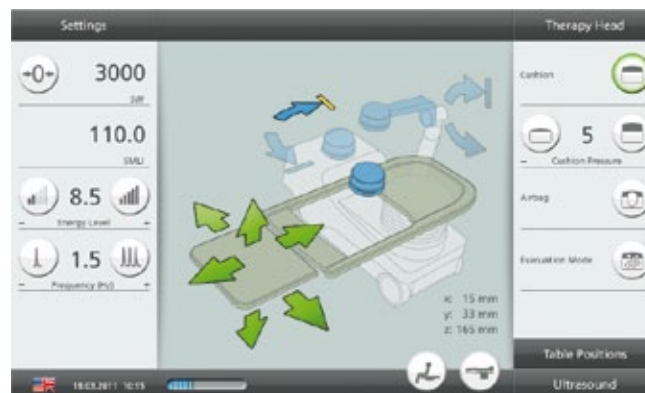
Routine tasks such as table movements are performed fully automatically, enabling the therapist to focus on the essentials: successful treatment of patients.

- Maximum ease of use
- Direct access to all essential functions
- Automated routine tasks

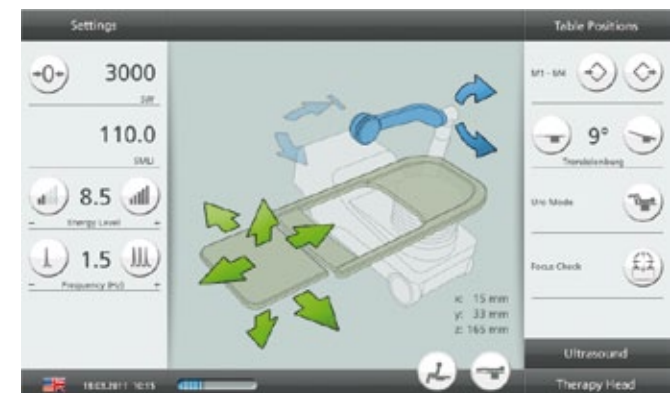
Treatment with therapy head in under-table position



Treatment with therapy head in over-table position



Controls for endourological procedures





## Successful endourology

The new MODULITH® SLK is designed to be the multifunctional solution for all stone therapies e.g. placing a double-J stent before SWL or performing URS or PCNL on the table. Trendelenburg tilt and a removable insert plate make the integrated table of the MODULITH® SLK perfectly suitable for successful endourological procedures.

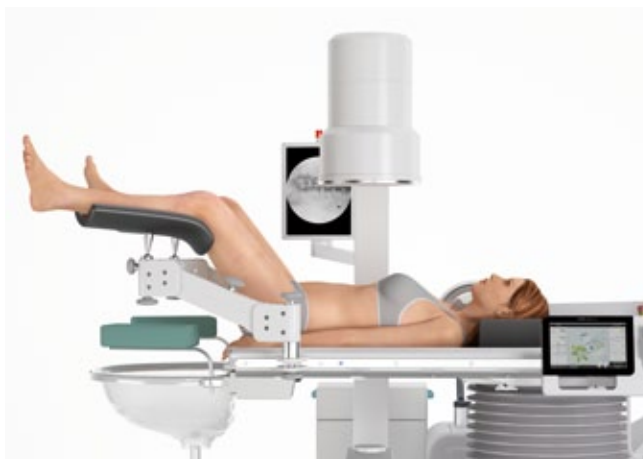
The therapy head can be stowed away ensuring good access to the patient from all sides. A wide range of accessories like stirrups, multi-functional footswitch and drain bags allows a customisation of the workspace according to the hospital demands.

- Trendelenburg tilt (optional)
- Wide range of accessories
- SWL and endourology

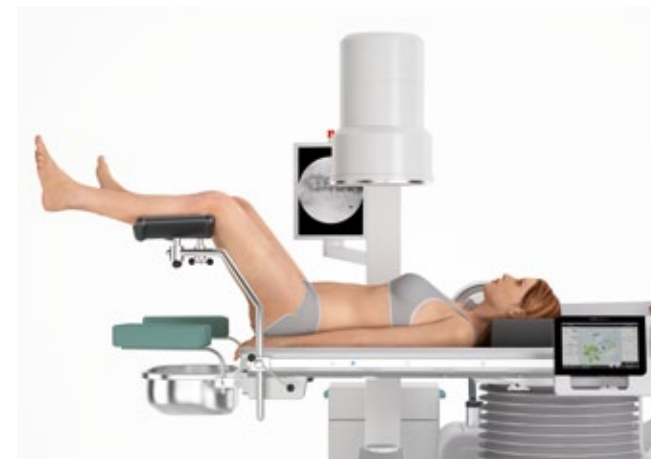
Trendelenburg tilt



Uro-kit »flex« and »comfort« stirrups



Uro-kit »steel« and type »Goepel« stirrups







## Smart solutions

The MODULITH® SLK comes with a series of innovations to facilitate many routine tasks in clinical practice. The patient table can be folded into a space-saving transport position to ensure easy transfer of the workstation to or from the treatment room. A built-in brake and anti-tip bar are provided to secure the system in its position and ensure safe and easy handling. The on-board focal gauge is ready for use at all times, so that system re-alignment during set-up is accomplished within seconds.

Remote control of the lithotripter and X-ray system from behind lead-glass windows provides perfect radiation protection. This remote control option enables complete control and monitoring of all movements, therapy parameters and X-ray functions. Users are free to operate the MODULITH® SLK from the on-board touch screen panel in the treatment room or from identical touch screens located in the remote control room.

- Simple system movement
- On-board focal gauge
- Remote control option

Design



On-board focal gauge



Remote control





## Quality and sustainability

STORZ MEDICAL lithotripters are manufactured using premium quality materials and components to ensure long service life. The unique monocoque structure is made of high-quality stainless steel. This translates into a light-weight, yet sturdy base. Precision guides provided for all patient table axes guarantee accurate patient positioning throughout the entire service life of the lithotripter system.

High-quality materials and innovative design leave a positive and trustworthy impression among therapists and patients alike.

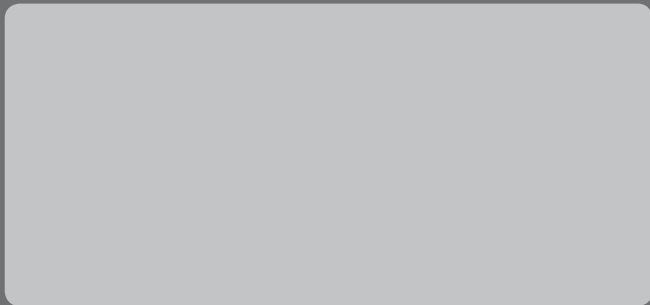
System assembly, testing and inspection are performed by qualified specialist personnel at STORZ MEDICAL's headquarters in Switzerland.

- Durable value
- Prize-winning design
- »Swiss made«



red dot design award  
winner 2011

## SHOCK WAVE TECHNOLOGY FOR PEOPLE



**STORZ** MEDICAL

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