SWISS LITHOCLAST® 2
THE GENUINE SWISS LITHOCLAST® 2

THE EVOLUTION IN LITHOCLAST® STONE THERAPY – FROM THE INVENTOR OF THE SWISS LITHOCLAST® METHOD

- BETTER TREATMENT RESULTS
- BETTER HANDLING
- EASIER REPROCESSING

SETTING A NEW STANDARD FOR SAFETY AND EFFECTIVENESS
THE NEW PNEUMATIC
pn3 HANDPIECE –
INNOVATIVE FUNCTION
AND DESIGN

THE RESULT OF RESEARCH AND DEVELOPMENT –
THE INNOVATIVE HANDPIECE OF THE SWISS LITHOCLAST®2

> The pn3 handpiece is extremely lightweight and ensures optimum operator control with its good ergonomic design.
> The coupling section of the air supply tube rotates and the compressed-air tube is now longer without losing any pulse efficiency. This allows greater freedom of movement for the user in all treatment situations.
> The pn3 handpiece and compressed-air tube is a sealed system and can be autoclaved or sterilized without additional sealing caps. This means no penetration of liquids and moisture, no blocking of the projectile and no related handpiece failure.
> The quick-connection probe caps provide easy, fast and sterile probe change.
> All components – handpiece and probes – remain extremely durable due to highest material and manufacturing quality.

INNOVATION IN THE HANDS
OF THE PHYSICIAN

> GREATLY REDUCED PROBE DISPLACEMENT
WITH THE pn3 HANDPIECE IMPROVES
FRAGMENTATION CONTROL AND REDUCES
PUSH-BACK EFFECT

> SWISS LITHOCLAST® pn3 HANDPIECE
COMPAARED TO STANDARD HANDPIECE –
PROBE DISPLACEMENT MEASURED AT A
PRESSURE OF 2 BAR
FLEXIBLE IMPULSE FREQUENCY, CONTROLLED BY THE PHYSICIAN

SELECTION OF IMPULSE FREQUENCY IN 12 STEPS, WITH SINGLE IMPULSE SHOTS OR WITH CONTINUOUS IMPULSES ON BOOST FREQUENCY – CONTROLLED BY THE PHYSICIAN THROUGH A DUAL FOOT PEDAL

THE CHALLENGE FOR THE DEVELOPMENT TEAM OF THE SWISS LITHOCLAST® METHOD WAS THE “PUSH-BACK EFFECT”

- Loss of mobile stones up the ureter, caused by the lithotripsy impulse, was frustrating. This was often caused by an impulse frequency badly suited to the treatment situation. This problem occurs, if the physician cannot control or adapt the impulse frequency quickly and easily.

THE SWISS LITHOCLAST®2 FIGHTS THE PUSH-BACK EFFECT BY MEANS OF THREE ESSENTIAL INNOVATIONS

- The impulse frequency can be adjusted in single Hertz increments – by means of the dual foot pedal, the physician can intraoperatively select between single impulse, low impulse frequency and boost frequency.
- The probe displacement has been greatly reduced – this reduces forward momentum on the stone at impact.
- The newly developed Swiss LithoVac® suction system – suction lithotripsy in the ureter – enables continuous irrigation ureteroscopy and controls the push-back effect on its own.
FLEXIBILITY LINKED TO CONTROL

NEWLY DEVELOPED SWISS LITHOVAC® SUCTION SYSTEM FOR CONTINUOUS IRRIGATION URETEROSCOPY HELPS TO CONTROL THE PUSH-BACK EFFECT

CLINICAL PROOF FOR THE EFFECTIVENESS OF THE SWISS LITHOVAC® SUCTION SYSTEM

FIRST-SHOT SOLUTION

SAFE AND SUCCESSFUL LITHOTRIPSY WITH VERY SHORT TREATMENTS, INDEPENDENT OF STONE COMPOSITION

SUCCESSFUL TREATMENT OF ALL TYPES OF URINARY STONES

URINARY STONES OF DIFFERENT COMPOSITION – FRAGMENTED WITH THE SWISS LITHOCLAST® METHOD

- The Swiss LithoClast® transmits energy from the probe onto the stone – thermal tissue damage is excluded.
- The urothelium remains intact even after being hit repeatedly with impulses at the highest energy setting of the Swiss LithoClast® 2.

1. Flexible lithotripsy with the Swiss LithoClast® 2 in the ureter
2. Suction lithotripsy of ureteric stones with Swiss LithoClast® 2 and Swiss LithoVac®
3. Percutaneous application with flexible nephroscope and flexible Swiss LithoClast® probe
4. Percutaneous stone fragmentation with Swiss LithoClast® and Swiss LithoVac®
5. Pneumatic suction lithotripsy using Swiss LithoClast® and Swiss LithoVac® in the bladder

THE SWISS LITHOCLAST® METHOD TREATS ALL STONES IN ALL LOCATIONS
Safe, effective and cold: these are the main features of the genuine Swiss LithoClast® Method – developed by EMS – since its market introduction in 1990.

The Swiss LithoClast® generates energy without heat development – thermal damage in the urinary tract is eliminated for maximum tissue safety.

No electrical energy is used for generating the acoustic waves – the highest safety for the patient and physician is guaranteed.

The outstanding effectiveness of the Swiss LithoClast® results in short treatment duration, independent of the stone composition, with the flexibility of use in the entire urinary tract. And, last but not least, it is the quality of all components, as well as their ease of use and maintenance which made this a unique success.

The newly developed Swiss LithoVac® suction system is user friendly and easy to clean and to sterilize.

The new generation of Swiss LithoClast® endoscopes has an impressive and outstanding optical system – ureteroscopy with 50,000 Pixel image resolution in small-diameter scopes represents a new dimension in endoscopic image quality.

The Swiss LithoClast® endoscopes enhance stone therapy – simple, safe handling, no kinking of lithotripsy and suction probes thanks to special guidance adapters.

The genuine Swiss LithoClast® Method – for more than a decade the modern term for endoscopic lithotripsy, setting the benchmark for safe and effective stone therapy.
EMS IS THE GOLD STANDARD

> EMS – Electro Medical Systems – has been setting the standards in the development and production of medical devices since 1981. Each product is individually produced and tested in Switzerland – with Swiss precision.
> With over 8,000 Swiss LithoClast® devices in daily use, EMS is the world’s largest supplier of intracorporeal shockwave lithotriptors for the treatment of kidney, ureteral and bladder stones.
> EMS is one of the world’s leading manufacturers of prophylactic dental devices.
> With its patented Swiss DolorClast®, EMS offers products that benefit from the expertise and experience with pneumatically generated shockwaves. Since its market introduction in 1999, Swiss DolorClast® has been the reference for successful pain therapy and has made EMS the number one in Radial Shockwave Therapy.
> Product certification received by EMS: ISO 9001, EN 46001 (Medical Devices), GMP (Good Manufacturing Practice) and CE guidelines.
> Like all EMS products, Swiss LithoClast® meets the highest European and international quality standards.

### SWISS LITHOCLAST®

**Swiss LithoClast® 2 basic unit**
- 100–240 VAC, 40 VA, 50/60 Hz
- incl. foot pedal, compressed-air connection, pneumatic pn3 handpiece,
- Swiss LithoClast® probes 0.8/1/1.6/2 mm

**Swiss LithoClast® probes**
- Probe Ø 2 mm, 425 mm length
- Probe Ø 1.6 mm, 605 mm length
- Probe Ø 1 mm, 605 mm length
- Probe Ø 0.8 mm, 605 mm length
- Probe Ø 3.2 mm, 425 mm length
- Handpiece probe cap for 3.2-mm probe
- Probe Ø 1.6 mm, 453 mm length
- for suction probe EL-212
- Probe Ø 0.8 mm, 668 mm length
- for suction probe EL-212
- Flexible probe Ø 0.89 mm, 940 mm length
- for flexible ureterorenoscopes
- Flexible probe Ø 0.89 mm, 600 mm length
- for flexible nephroscopes

**Stone catcher**
- Stone catcher holder
- Stone catcher sterile (box of ten)

**Stone catcher**
- collection of stone fragments

**SWISS LITHOVAC®**

**Swiss LithoVac® set lv3**
- Suction probe Ø 1.6 mm, 555 mm length
- Suction probe Ø 3.5 mm, 360 mm length
- Suction probe Ø 4 mm, 330 mm length

**Ureterorenoscope HANDPIECE ADAPTER**
- Handpiece adapter for EMS FR-107/108
- Handpiece adapter for EMS FR-023
- Handpiece adapter for Olympus type A-29xx
- Handpiece adapter for Olympus type A-24xx
- Handpiece adapter for Storz

**Sterilization tray**
- Sterilization tray 700x120x75 mm, autoclavable

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