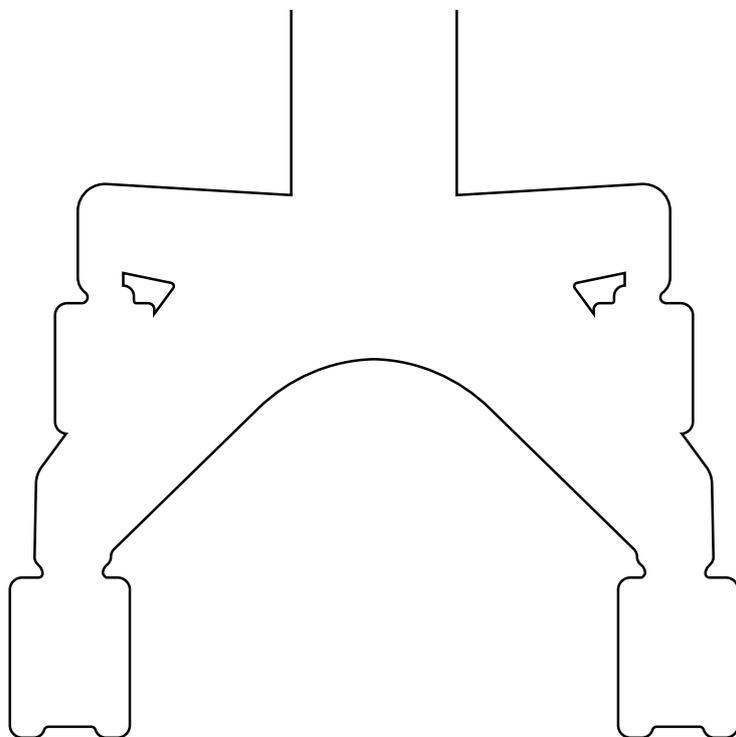


**SWISS LITHOCLAST®**  
**TRILOGY**



**EMS<sup>+</sup>**

# SWISS LITHOCLAST® TRILOGY

## EXPERIENCE LITHOTRIPSY LIKE NEVER BEFORE

- > When it comes to large and hard kidney stones, percutaneous nephrolithotomy (PCNL) can turn into a complex procedure.
- > What if you could clear any kind of stone, in any location, up to 48% more rapidly, easily and without compromising safety?
- > Today, Swiss LithoClast® Trilogy makes it possible: breakthrough technology designed to reduce procedure time and enhance the surgical experience for patient, urologist and OR staff.

**FAST. EASY. SAFE.**

**COMPLEX  
KIDNEY  
STONE  
TREATMENTS  
JUST GOT  
SIMPLER →**

total  
staghorn  
stone

3 cm calcium  
oxalate  
monohydrate  
stone

1.8 cm stone  
in the  
lower calyx

# POWER AND CONTROL

GET POWERFUL FRAGMENTATION AND MORE EFFICIENT STONE REMOVAL FOR SHORTER PCNL PROCEDURAL TIME



## BECAUSE TIME MATTERS

> Observational research<sup>1</sup> shows that stone fragmentation and removal account for **30%** of total PCNL procedural time; about 24 minutes on average in the US.

## CLEARANCE SPEED MATTERS

> Bench studies show that Swiss LithoClast® Trilogy fragments and removes stones up to **48%** faster than competing dual-energy lithotripter<sup>2,3</sup>.



### 1. FAST FRAGMENTATION<sup>4</sup>

> Swiss LithoClast® Trilogy can fragment even the largest and hardest stones thanks to independently generated ultrasonic and ballistic energies that can be used simultaneously or separately.

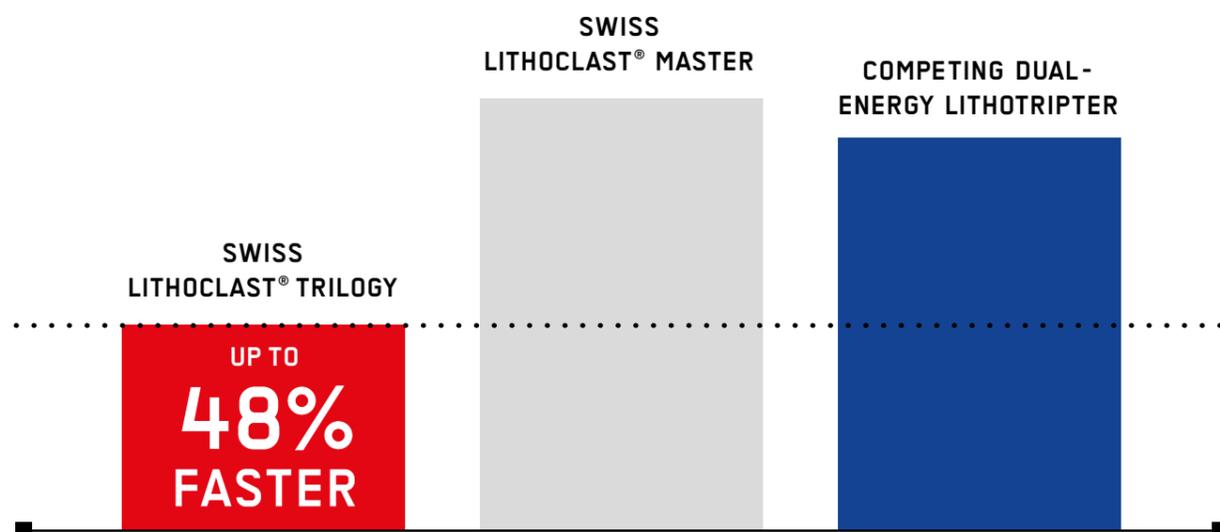
### 2. MOST ACCURATE STONE CONTROL

> Thanks to precise probe tip movements, Swiss LithoClast® Trilogy significantly reduces stone repulsion effect.

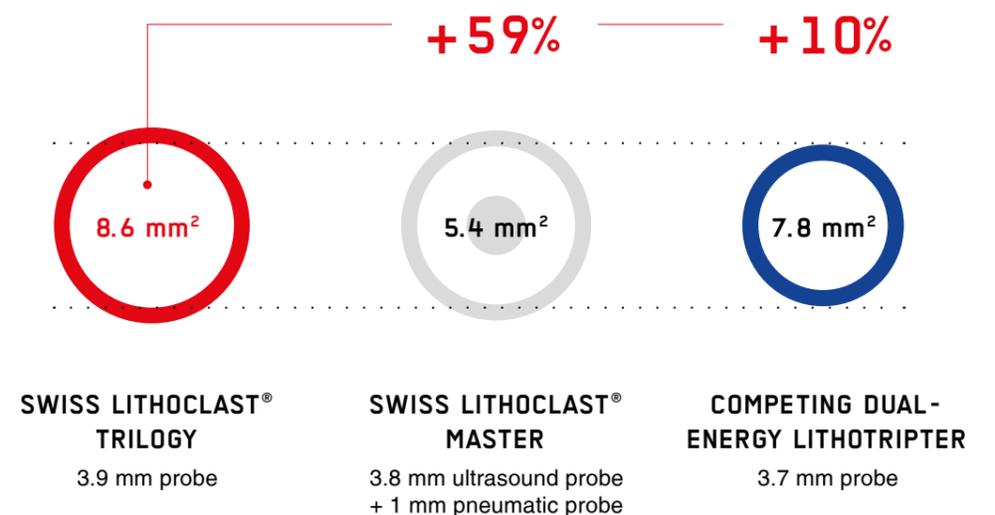
### 3. LARGE FRAGMENTS REMOVAL CAPACITY

> Swiss LithoClast® Trilogy offers the largest probe lumen size, easing the removal of large stone fragments. In addition, the integrated suction system enables fast evacuation of all fragments.

## AVERAGE LITHOTRIPTER TIME TO CLEARANCE



## CROSS-SECTION VIEW OF PROBE LUMEN<sup>4</sup>



<sup>1</sup> Studies on file with Boston Scientific.

<sup>2</sup> Bader MJ, et al. Endoscopic clearance lithotripsy devices: bench comparison of stone elimination capacity and drilling speed. University of Munich. Presented at the World Congress of Endourology, Vancouver, 2017.

<sup>3</sup> Bader, et al. Comparative evaluation of tissue damage induced by ultrasound and impact dual mode endoscopic lithotripsy versus conventional single mode ultrasound lithotripsy. University of Munich. Presented at the World Congress of Endourology, Vancouver, 2017.

<sup>4</sup> Data on file at E.M.S Electro Medical Systems S.A.

# FOCUS ON THE ESSENTIAL

PLUG-AND-PLAY SYSTEM THAT IS SIMPLE TO LEARN AND EASY TO USE FOR PHYSICIANS AND STAFF

**EASY**

## 1. EASY SETUP

- > One single console fits all: no need for external compressor nor suction pump.
- > Limited number of components for quick and effortless assembly.
- > Torque wrench guarantees optimum probe tightening in a single twist of the wrist.

## 2. EASY FRAGMENTATION

- > Contactless probe recognition and automatic calibration of the energy level.
- > Large touch screen designed for easy setting of all parameters.
- > Quality meter for visual monitoring of fragmentation procedure.

## 3. EASY STONE REMOVAL

- > Precise roller pump for optimized suction flow control.
- > Improved Stone Catcher for seamless and sterile fragment collection.
- > Fluid collection bags with solidifying gel for easy disposal.



“IT TAKES PROFOUND KNOWLEDGE  
TO DO THINGS IN A SIMPLE MANNER”

Anne Robert Jacques TURGOT  
General controller of finance, France, 1774

FAST. EASY. SAFE.

# PATIENT CARE AT ITS BEST

PERSONALIZE YOUR STONE TREATMENT IN AN ENVIRONMENT OF CARE AND COMFORT

**SAFE**

Developed at the EMS Research Center in collaboration with leading urologists from around the world, Swiss LithoClast® Trilogy focuses its design and functionalities on users and patients alike with one goal in mind:

## → CLINICAL SUCCESS

### 1. VERSATILE

- A complete range of probes is available to suit individual patients: from standard PCNL down to minimally invasive stone treatments (Miniperc) but also cystoscopy and semi rigid ureteroscopy.
- The intuitive touch screen is helping the user to select treatment modalities and to customize energy and suction settings.

### 2. SMART

- The integrated suction system is only activated during the treatment, limiting undesired stone movements and suction cup effects on mucosal tissue.
- An active cooling system regulates the temperature of the handpiece: This is good for your hand's comfort but also for the system durability.
- Smart Power meter enables to control and deliver ultrasonic energy with optimal efficiency.

### 3. TRACEABLE

- Contactless RFID tags for recording complete treatment parameters.
- Similarly, the service lifetime of each component may be monitored to make sure the system is ready for use at any time.



**FAST. EASY. SAFE.**

# THE POWER OF 3. TRILOGY MAKES IT POSSIBLE

BALLISTICS, ULTRASOUND AND SUCTION: 3 MODALITIES IN A SINGLE PROBE THAT CAN BE USED SIMULTANEOUSLY OR SEPARATELY

## SMART ULTRASONIC ENERGY MANAGEMENT

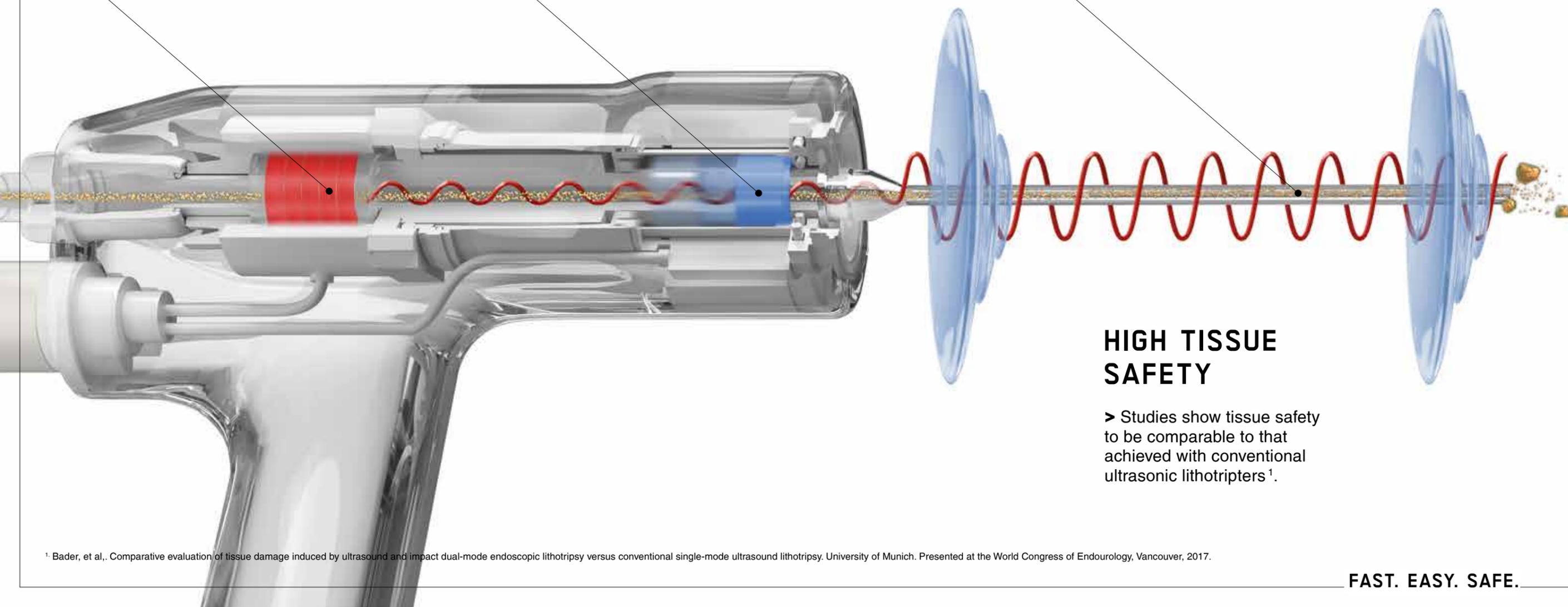
> Advanced auto adaptative algorithm delivers precise, constant ultrasonic energy for fine fragmentation and dusting of stones.

## TRUE BALLISTIC IMPACT

> Breakthrough electromagnetic technology generates real ballistic energy for powerful and coarse fragmentation of large and hard stones.

## OUTSTANDING SUCTION CAPACITY

> Wide hollow probe and precise suction guarantee continuous removal of even large stone fragments.



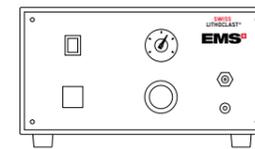
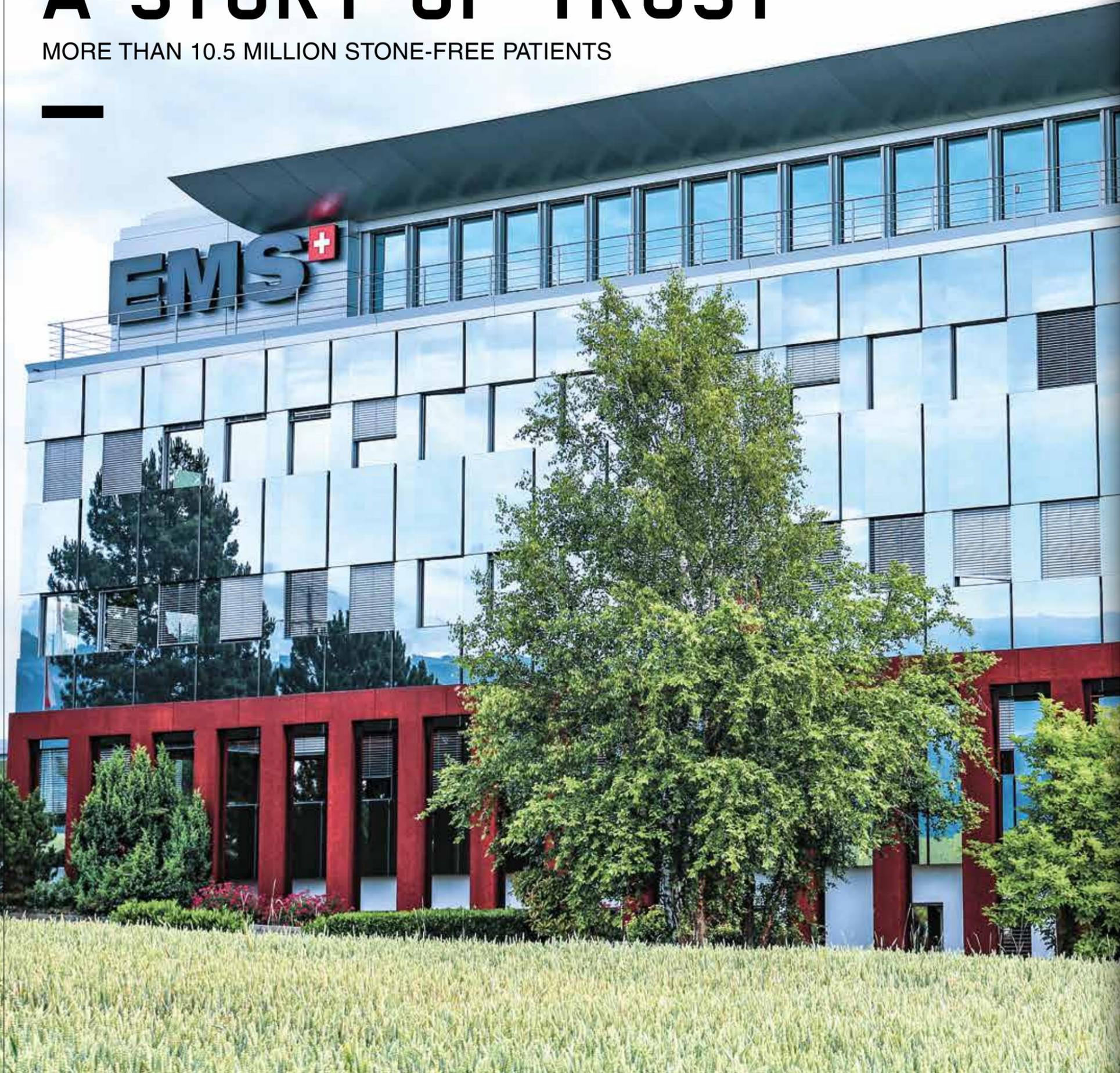
## HIGH TISSUE SAFETY

> Studies show tissue safety to be comparable to that achieved with conventional ultrasonic lithotripters<sup>1</sup>.

<sup>1</sup> Bader, et al., Comparative evaluation of tissue damage induced by ultrasound and impact dual-mode endoscopic lithotripsy versus conventional single-mode ultrasound lithotripsy. University of Munich. Presented at the World Congress of Endourology, Vancouver, 2017.

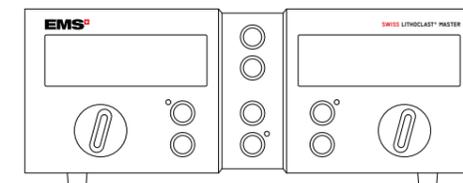
# A STORY OF TRUST

MORE THAN 10.5 MILLION STONE-FREE PATIENTS



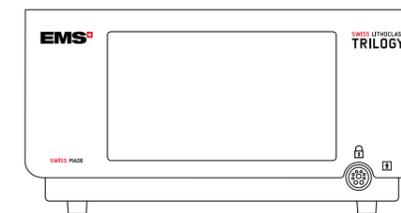
## SWISS LITHOCLAST®

EMS offers a revolutionary solution to free patients from stones: the first intracorporeal ballistic lithotripter.



## SWISS LITHOCLAST® MASTER

Ground breaking innovation in combined rigid lithotripsy, it becomes the gold standard and pacesetter.



## SWISS LITHOCLAST® TRILOGY

The new care standard for multimodal endoscopic stone management, it improves the overall clinical performance in stone management.

## HISTORY AND FUTURE OF STONE MANAGEMENT

> With over 14,000 Swiss LithoClast® devices in use worldwide in more than 25 years, EMS has revolutionized rigid endoscopic lithotripsy. Safe, efficient, cost-effective, Swiss LithoClast® has become the gold standard in rigid and semi rigid endoscopic lithotripsy avoiding complex open surgery.

> With a proven track record of game-changing solutions, we strive for perfection and are committed to improving the quality of life for the patient. Our Swiss quality products continue to shape the history and future of stone management.

FAST. EASY. SAFE.

# DEVICE, HANDPIECE & ACCESSORIES

## SWISS LITHOCLAST® TRILOGY

Swiss LithoClast® Trilogy unit includes peristaltic pump, Trilogy handpiece and foot pedal

FT-232

## SWISS LITHOCLAST® TRILOGY HANDPIECE KIT

FR-278

## SWISS LITHOCLAST® TRILOGY ACCESSORIES

Stone Catcher for Swiss LithoClast® Trilogy, sterile, box of 5

DT-483

Double suction bags, box of 5

DT-480

Cart for Swiss LithoClast® Trilogy

DW-047

## SWISS LITHOCLAST® TRILOGY PROBES

Disposable probe 3.9 mm x 350 mm



FR-245

Disposable probe 3.9 mm x 440 mm



FR-246

Disposable probe 3.4 mm x 340 mm



FR-247

Disposable probe 3.4 mm x 445 mm



FR-248

Disposable probe 1.9 mm x 341 mm



FR-249

Disposable probe 1.5 mm x 440 mm



FR-250

Disposable probe 1.1 mm x 425 mm



FR-252

Disposable probe 1.1 mm x 520 mm



FR-253

Disposable probe 1.1 mm x 625 mm



FR-254



**EXPERIENCE  
LITHOTRIPSY  
LIKE NEVER  
BEFORE**

"The information in this brochure is only intended for medical and health care professionals.  
The brochure provides information on products and indications that may not be available in all countries."

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