ORIGINAL SWISS LITHOCLAST® MASTER
TAKEN TO ITS BEST
BY THE INVENTOR OF THE SWISS LITHOCLAST® METHOD

- VARIO ULTRASOUND HANDPIECE
- ADDED FEATURES WITH NEW SOFTWARE
- EASIER HANDLING
- MORE ACCESSORIES

COMBINED ULTRASOUND
AND PNEUMATIC LITHOTRIPSY
ALL-IN-ONE LITHOTRIPSY

THE ONE-OF-A-KIND SWISS LITHOCLAST® MASTER – A PERFECT COMBINATION OF ULTRASOUND AND PNEUMATIC LITHOTRIPSY FOR MANAGING STONES

- Pneumatic effect for fast coarse fragmentation
- Powerful ultrasonic lithotripsy for fine fragmentation and pulverization
- Simultaneous use of both technologies for multiplied action

VARIO ULTRASOUND HANDPIECE
PERFECTLY SUITED FOR ALL TREATMENT MODALITIES

- Faster stone clearance – less blockage
  - Optimized fragment transport through dedicated suction connectors
  - Enhanced ultrasound effectiveness due to optimized transducer design
- Comfortable and convenient handling thanks to reduced size and weight as well as optimal ergonomics
- Instantaneous intraoperative switch from combined ultrasound/pneumatic mode to ultrasound only mode
- Long-lasting ultrasound probes thanks to optimized design

COMPLEMENTARY TECHNOLOGIES
PNEUMATIC HANDPIECE pn3 →
INNOVATION IN FUNCTION AND DESIGN

> Reduced probe displacement
  – less push-back
  – greater fragmentation control
> Optimum operator control thanks to light weight and perfect ergonomics
> Easy reprocessing thanks to sealed system
  – no moisture-related handpiece failure
> Easy, fast and sterile probe change due to quick-connection probe cap
> Extremely durable handpieces and probes in best material and manufacturing quality

THE BENEFITS OF THE EMS COMBINED LITHOTRIPTER PRINCIPLE AND IMPACT ARE CLEARLY DOCUMENTED IN SCIENTIFIC COMPARISONS

THE PRINCIPLE →

> Acclaimed and proven ballistic lithotripsy – the Swiss LithoClast® principle – for coarse stone fragmentation
> High-performance ultrasound lithotripsy for fine fragmentation and pulverization
> Simultaneous use of both technologies for enhanced efficacy
> Choice of the most effective method during treatment

THE IMPACT →

> Most effective method for the removal of large calculi
> Faster stone removal: clinically proven four times faster than Swiss LithoClast® Standard and more than twice as fast compared to standard ultrasound lithotripters
> Prevention of stone fragment blockage in the ultrasound handpiece and probes

Source:
Auge, Pietrow, Preminger et al., World Congress of Endourology (Genova 2002)
SWISS LITHOPUMP®
FOR ALL SWISS LITHOCLAST® DEVICES

PRECISELY ADJUSTABLE FOR ALL SUCTION REQUIREMENTS OF LITHOTRIPSY PROCEDURES

- Fail-safe, silent, no electricity, easy setup
  - fully pneumatically driven pump based on the Venturi principle
- Highly adjustable, controls negative pressure
  - constant optimal view without pressure peaks
- Hygienic and clean
  - double bacteria retention filter system
- Accessories by MEDELA
  - complete configuration, either disposable or reusable

VENTURI PRINCIPLE

ULTIMATE STONE THERAPY

SWISS LITHOCART →
Complete setup of Swiss LithoClass® Master, Swiss LithoPump®, suction accessories and compressor
### Swiss LithoClast® Master

**Master basic unit incl. dual foot pedal, compressed air connection, pneumatic handpiece, vario ultrasound handpiece, stone catcher and a selection of Swiss LithoClast® and ultrasound probes**

### Vario Ultrasound Handpiece Upgrade Kit

Includes vario ultrasound handpiece, straight and lateral suction connector and software processor revision 3.

### Swiss LithoPump®

**Basic unit incl. overflow protection filters, connection set, compressed air connection and exhaust connector kit**

### Swiss Lithocart All-in-One Cart

### Sterilization Tray

- **Sterilization tray 700x120x75 mm**, autoclavable, for FR-107 and FR-108
- **Sterilization tray 500x200x60 mm**, autoclavable, for FR-082

### Stone Catcher

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

### Swiss LithoClast® Probes

- **Probe Ø 2.0 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**
- **Probe cap for 3.2 mm probe**
- **Flexible probe Ø 0.89 mm, 940 mm length for flexible ureteroscopes**
- **Flexible probe Ø 0.89 mm, 600 mm length for flexible nephrosopes**

### Pneumatic Combination Probes

- **Probe Ø 1.0 mm, 570 mm length**
  - Combination with FR-083 and FR-084
- **Probe Ø 1.3 mm, 570 mm length**
  - Combination with probe FR-083
- **Probe Ø 1.0 mm, 497 mm length**
  - Combination with FR-105 and FR-106

### Ultrasound Probes

- **Probe Ø 3.8 mm, 403 mm length**
- **Probe Ø 3.3 mm, 403 mm length**
- **Probe Ø 3.3 mm, 330 mm length**
- **Probe Ø 3.8 mm, 330 mm length**

### Ultrasound Disposable Probes

- **Probe Ø 3.8 mm, 403 mm length**
- **Probe Ø 3.3 mm, 403 mm length**
- **Probe Ø 3.3 mm, 330 mm length**
- **Probe Ø 3.8 mm, 330 mm length**
- **Probe Ø 1.5 mm, 573 mm length**
- **Probe Ø 1.9 mm, 360 mm length**

### BEST RESULTS

- **High stone-free rates**
  - Up to 95% for ureteral stones using pneumatic lithotripsy
  - Up to 90% for PNL procedures using combination lithotripsy
- **High tissue safety**
  - The highest tissue safety of all endoscopic lithotripters
- **Fast fragmentation and clearance time**
  - Combination mode with the Swiss LithoClast® Master clears stones twice as fast as ultrasound-alone lithotripters
  - Pneumatic lithotripters with the Swiss LithoClast® fragments stones on average faster than Holmium laser
- **Best costs**
  - Save 28 minutes compared to laser lithotripsy
  - OR time costs $62 per minute
  - Save on average $1,736 per PNL compared to laser lithotripsy

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1 Malik, Rizvi et. al, 2007: Comparison of HO-YAG laser and Swiss LithoClast® in percutaneous nephrolithotomy
2 A. Macario, Stanford University USA, 2010: What does one minute of operating room time cost?