

11+

MILLION

UROLOGY PRODUCTS

**STONE - FREE
PATIENTS**

SINCE 1991

EMS⁺

OUR MISSION

HAPPY AND HEALTHY PATIENTS,
SUCCESSFUL CLINICIANS AND PASSIONATE
PARTNERS, THIS IS OUR MISSION.
WE DELIVER INNOVATIVE AND CLINICALLY
PROVEN TREATMENT OUTCOMES IN THE
LEAST INVASIVE WAY. WE ARE COMMITTED
TO FOSTERING KNOWLEDGE BY TRAINING
AND EDUCATING HEALTHCARE PROFESSIONALS,
PARTNERS AND EMPLOYEES.

MARKET LEADER IN
ENDOSCOPIC LITHOTRIPSY,
EMS SHAPES HISTORY AND FUTURE
OF STONE MANAGEMENT.



CONTENTS

INTRODUCTION	6
A story of trust	8
A solution for all stones	10
 SWISS LITHOCLAST® TRILOGY	 12
Swiss LithoClast® Trilogy principle	14
Swiss LithoClast® Trilogy	16
Swiss LithoClast® Trilogy handpiece	20
 SWISS LASERCLAST®	 22
Holmium: YAG Benefits	24
Swiss LaserClast®	26
EMS SmartFibers	30
 SWISS LITHOCLAST®	 32
Swiss LithoClast® principle	34
Swiss LithoClast® Master	36
Swiss LithoClast® 2	40
Swiss LithoBreaker®	44

SWISS LITHOCLAST®	
 HANDPIECES AND PROBES	 48
Vario Ultrasound handpiece	50
Vario Ultrasound handpiece Upgrade Kit	52
Ultrasound probes	53
Pn3 Pneumatic handpiece	54
Swiss LithoClast® probes	56
Swiss LithoBreaker® probes	57
Swiss LithoClast® flexible probes	58
 SUCTION	 60
Swiss LithoPump®	62
Swiss LithoVac® LV3	66
Stone Catcher	67
 ENDOSCOPES AND ADAPTERS	 68
Cysto-/nephroscope	70
Ureterorenoscopes	71
Adapters for endoscopes	72
Accessories for endoscopes	73
 ACCESSORIES / PROBE SELECTOR	 74



IT TAKES PROFOUND KNOWLEDGE TO DO THINGS IN A SIMPLE MANNER

ANNE ROBERT JACQUES TURGOT
General controller of finance, France, 1774

A STORY OF TRUST

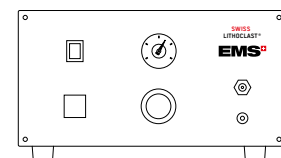
MORE THAN 11 MILLION STONE-FREE PATIENTS

> A distinct desire for innovation, a unique idea and a drive to meet the challenge: combining these ingredients, Bernd Bühner founded EMS Electro Medical Systems in Switzerland's Vallée de Joux in 1981. With a history spanning more than 30 years, EMS has launched a multitude of inventions and patents thus writing new chapters in the fields of dental prophylaxis, physiotherapy and stone management.

> Today, over 700 qualified and specialized employees collaborate around the world to implement the EMS philosophy and to turn visionary ideas into pioneering solutions. With a proven track-record of game-changing products, EMS is committed to delivering innovative and clinically proven solutions and improving the quality of life for the patients.



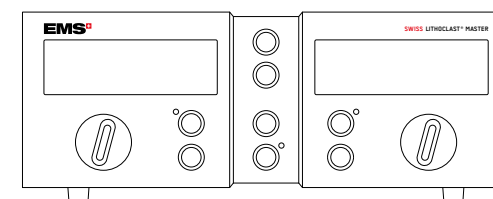
EMS IS AT THE FOREFRONT OF TECHNOLOGICAL DEVELOPMENT BY CONSISTENTLY LAUNCHING GAME-CHANGING PRODUCTS →



**SWISS
LITHOCLAST®**

1991

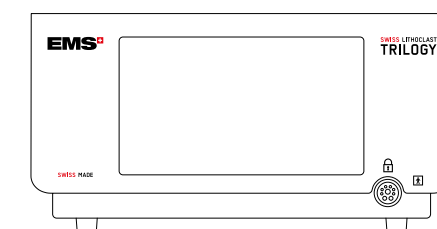
> EMS invents the first intracorporeal ballistic lithotripter, the Swiss LithoClast®. This revolutionary solution safely frees patients from stones while avoiding complex open surgery.



**SWISS
LITHOCLAST® MASTER**

2001

> EMS combines its patented ballistic technology with ultrasounds to address all type of stones in a single procedure. The Swiss LithoClast® Master quickly becomes the gold standard and pacesetter in combined rigid lithotripsy.



**SWISS
LITHOCLAST® TRILOGY**

2018

> EMS offers the new standard for multimodal endoscopic stone management. The Swiss LithoClast® Trilogy brings lithotripsy to a new level, greatly improving the overall clinical performance, safety and cost-effectiveness of stone management.

HISTORY & FUTURE OF STONE MANAGEMENT

> With over 14,000 Swiss LithoClast® devices in use worldwide and more than 11 million stone-free patients in more than 25 years, EMS has revolutionized rigid endoscopic lithotripsy. Safe, efficient, cost-effective, Swiss LithoClast® principle is today's most commonly used rigid endoscopic stone treatment method. Our Swiss quality products continue to shape the history and future of stone management.

A SOLUTION FOR ALL STONES

COMBINED LITHOTRIPSY → FAST AND SAFE REMOVAL OF COMPLEX STONES

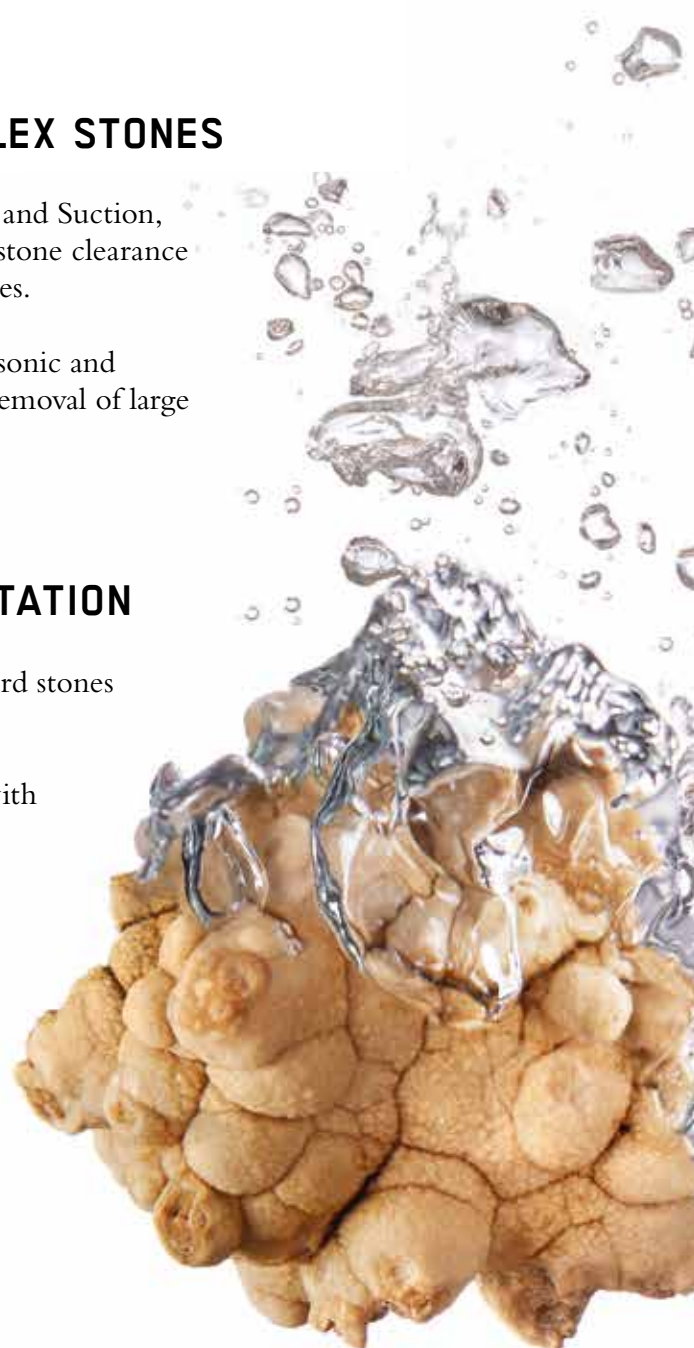
- > Swiss LithoClast® Trilogy: Ballistic, Ultrasounds and Suction, three modalities in a single probe for unprecedented stone clearance efficiency no matter the type and location of the stones.
- > Swiss LithoClast® Master: timeless combined ultrasonic and pneumatic lithotripter for proven fragmentation and removal of large kidney and bladder stones.

PNEUMATIC LITHOTRIPSY → POWERFUL AND COARSE FRAGMENTATION

- > Swiss LithoClast® 2: cost-effective solution for hard stones fragmentation with high tissue safety.
- > Swiss LithoBreaker®: handheld portable device with the performance of the original Swiss LithoClast®.

LASER LITHOTRIPSY → STONE TREATMENT THROUGH FLEXIBLE ACCESS

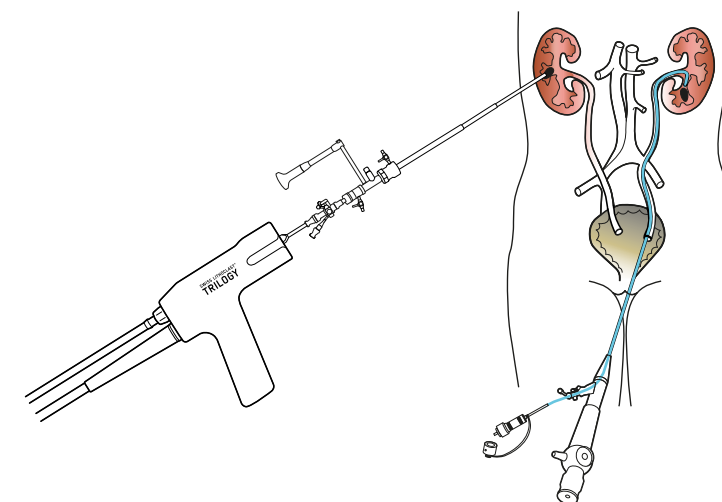
- > Swiss LaserClast®: fragmentation of stones in all locations of the urinary tract with excellent fragmentation control due to the choice between the short and long pulse modes.



SELECT THE BEST TREATMENT FOR EACH STONE CASE

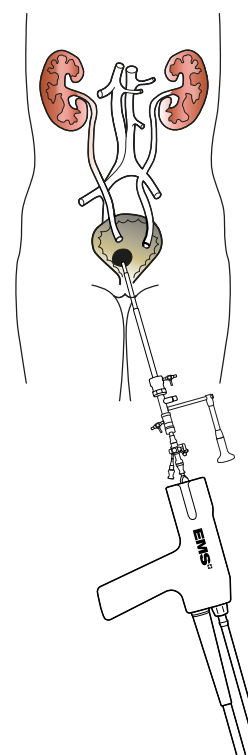
KIDNEY STONES

- > Percutaneous nephrolithotomy with the Swiss LithoClast® Trilogy, including mini and micro percutaneous accesses
- > Retrograde intra-renal surgery with the Swiss LaserClast®



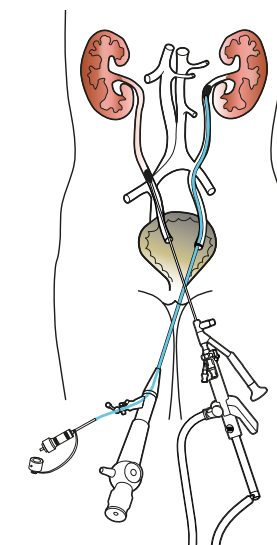
BLADDER STONES

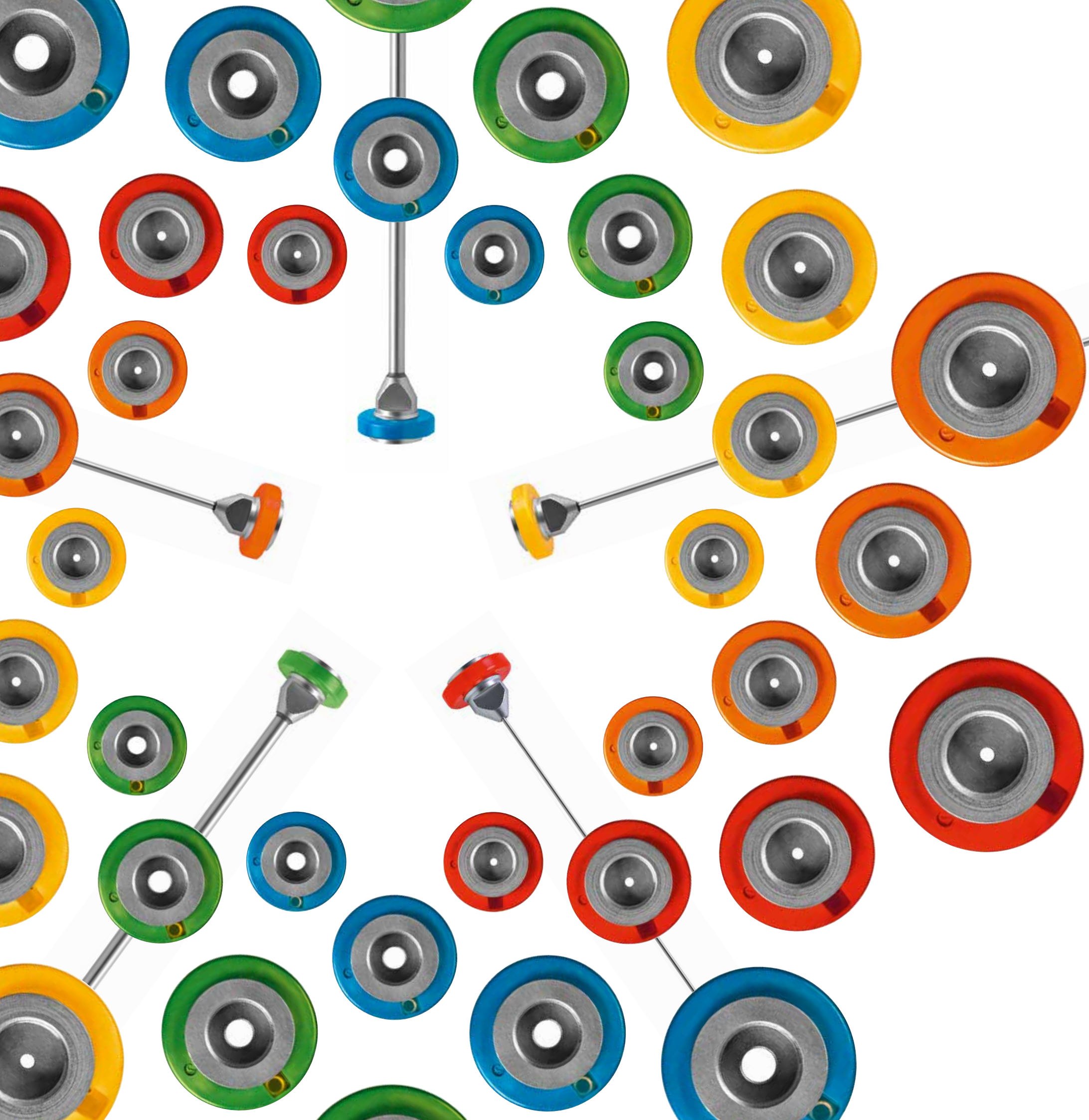
- > Cystoscopy with the Swiss LithoClast® Trilogy



URETERAL STONES

- > Semirigid ureteroscopy with the Swiss LithoClast® and the Swiss LithoVac® LV3
- > Semirigid ureteroscopy with the Swiss LithoClast® Trilogy
- > Flexible ureteroscopy with the Swiss LaserClast®





SWISS LITHOCLAST® TRILOGY

SWISS LITHOCLAST®
TRILOGY

THE POWER OF 3 TRILOGY MAKES IT POSSIBLE

BALLISTICS, ULTRASOUND AND SUCTION: 3 MODALITIES IN A SINGLE PROBE

1 SMART ULTRASONIC ENERGY MANAGEMENT

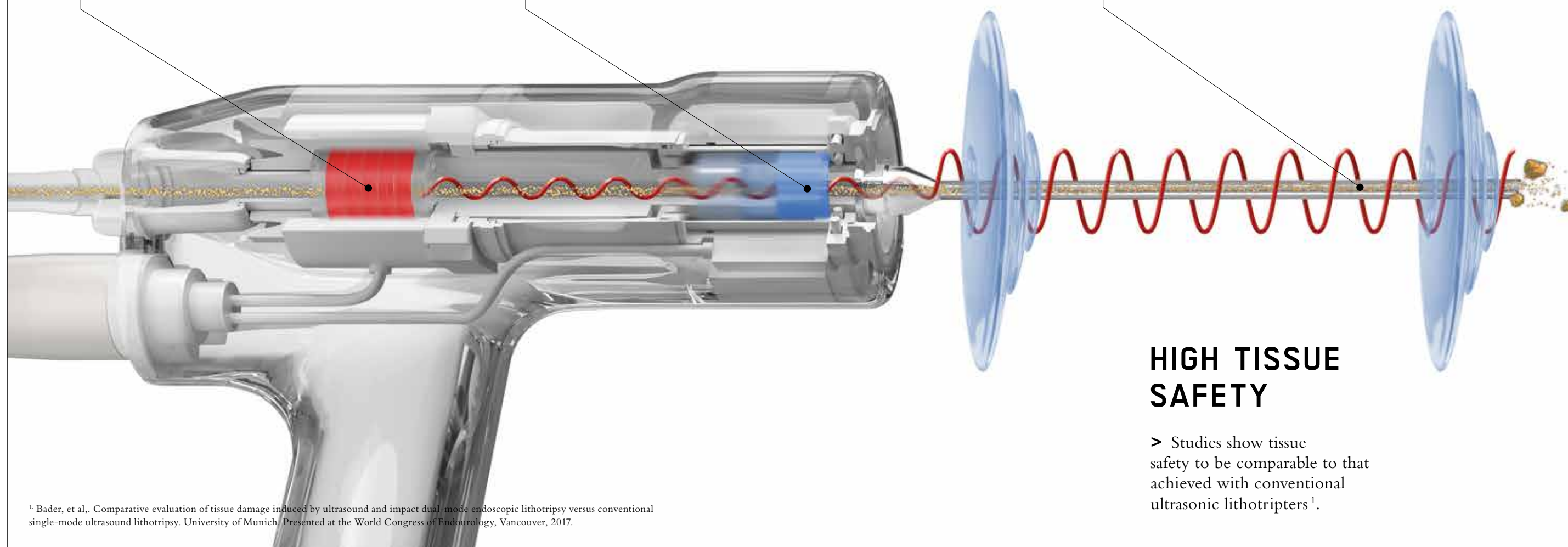
> Advanced auto adaptive algorithm delivers precise, constant ultrasonic energy for fine fragmentation and dusting of stones.

2 TRUE BALLISTIC IMPACT

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

3 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 lithotripters¹.

¹ 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.

SWISS LITHOCLAST® TRILOGY

EXPERIENCE LITHOTRIPSY
LIKE NEVER BEFORE



TECHNICAL SPECIFICATIONS

DIMENSIONS (H x W x D)	172 mm x 402 mm x 451 mm
WEIGHT	13.5 kg
CLASSIFICATION	EN-60601-1: Class I Applied part BF IP21 (handpiece and Foot pedal: IPX8) MDD 93/42 EEC: Class IIb
POWER SUPPLY	100-240 VAC / 50-60 Hz
POWER CONSUMPTION	500 VA
ENERGY OUTPUT	Ultrasound: 70 W Ballistic: 80 W
OPERATING MODE	Ultrasound: Continuous mode Ballistic: From 1 to 12 Hz
OPERATING CONDITIONS	Temperature +10°C to +30°C Relative humidity 30 % to 75 % Atmospheric pressure 700 hPa to 1060 hPa Altitude max. 3000 m
STORAGE AND TRANSPORT CONDITIONS	Temperature +5°C to +38°C Relative humidity max 85 % Atmospheric pressure 500 hPa to 1060 hPa
PRIMARY FUSES	6.3A, T (slow), 250 VAC (=T6.3A250V)
AIR SUPPLY	-



SWISS LITHOCLAST® TRILOGY INCLUDES →

SWISS LITHOCLAST® TRILOGY CONTROL UNIT WITH PUMP

- 1 Support for Stone Catcher
- 1 Foot pedal
- 1 Cleaning rod for Trilogy probes (Ø 3.4 and Ø 3.9 mm)
- 1 Cleaning rod for Trilogy probes (Ø 1.9 mm)
- 1 Power supply cable
- 1 HDMI cord
- 1 Filling Bottle
- 1 De-ionised water bottle
- 1 USB Key

SWISS LITHOCLAST® TRILOGY HANDPIECE KIT

- 1 Swiss LithoClast® Trilogy handpiece
- 1 Cleaning rod for handpiece
- 1 Probe Wrench 6 mm

- 1 Torque Wrench

ORDER NO. **FT-232#**

FT-232
AG-153
EK-386A
FR-316
FR-317
acc. to customer choice
acc. to country standard
DT-482
DV-145
DZ-025

FR-278
EN-075
DT-478A
DT-479

DT-492

ACCESSORIES →

SWISS LITHOCLAST® TRILOGY PROBES

- Ø3.9 mm, length 350 mm
- Ø3.9 mm, length 440 mm
- Ø3.4 mm, length 340 mm
- Ø3.4 mm, length 445 mm
- Ø1.9 mm, length 341 mm
- Ø1.5 mm, length 440 mm
- Ø1.1 mm, length 425 mm
- Ø1.1 mm, length 520 mm
- Ø1.1 mm, length 625 mm

FLUID MANAGEMENT SYSTEM

- Stone Catcher (Box of 5)
- Fluid Management System Set (Box of 5)
- Replacement Bag 5L (Box of 10)

SWISS LITHOCLAST® TRILOGY CART

PAGE	ORDER NO.
82	FR-245 FR-246 FR-247 FR-248 FR-249 FR-250 FR-252 FR-253 FR-254
19	DT-483 DT-480 DT-481
76	DW-047

FAST. EASY. SAFE.

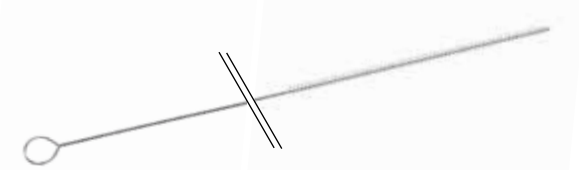
HDMI CORD



HDMI to HDMI cord, 10 m **CD-155**

HDMI to DVI cord, 10 m **CD-161**

CLEANING ROD FOR TRILOGY PROBES



Diameter 3.4 and 3.9 mm **FR-316**

Diameter 1.9 mm **FR-317**

FILLING BOTTLE



ORDER NO.
DT-482

DE-IONISED WATER BOTTLE



ORDER NO.
DV-145

STONE CATCHER (BOX OF 5)



ORDER NO.
DT-483

STONE CATCHER HOLDER



ORDER NO.
AG-153

FLUID MANAGEMENT SYSTEM SET (BOX OF 5)



ORDER NO.
DT-480

REPLACEMENT BAG 5L (BOX OF 10)



ORDER NO.
DT-481

SWISS LITHOCLAST® TRILOGY HANDPIECE

THE POWER OF 3, TRILOGY MAKES IT POSSIBLE



SWISS LITHOCLAST® TRILOGY HANDPIECE KIT INCLUDES →

- 1 Swiss LithoClast® Trilogy handpiece
- 1 Cleaning rod for handpiece
- 1 Probe Wrench 6 mm
- 1 Torque Wrench

ORDER NO. **FR - 278**

EN-075
DT-478A
DT-479
DT-492

OPTIONS AVAILABLE →

- Handpiece suction connector
- Sterilisation holder

EL-654
FR-327

DESIGNED FOR PATIENTS,
UROLOGISTS AND O.R. STAFF.

SWISS LITHOCLAST® TRILOGY HANDPIECE



ORDER NO.
EN - 075

CLEANING ROD FOR HANDPIECE



ORDER NO.
DT - 478A

TORQUE WRENCH



ORDER NO.
DT - 492

PROBE WRENCH 6 mm



ORDER NO.
DT - 479

HANDPIECE SUCTION CONNECTOR



ORDER NO.
EL - 654



STERILISATION HOLDER

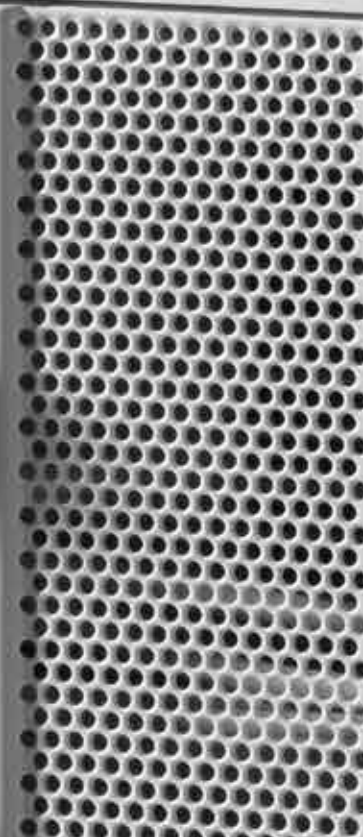


ORDER NO.
FR - 327

EMS

Swiss LaserClast®

	SHORT PULSES		LONG PULSES	
	POWER 12 W			
	FREQUENCY 15 Hz		ENERGY OUTPUT 0.00 kJ	
	ENERGY 0.8 J		PULSE COUNTER 0	
	BEAM 4			
STANDBY		PRESS PEDAL TO FIRE LASER		



HOLMIUM:YAG BENEFITS

SAFE

- > Ho:YAG laser emits light at 2.1 μm , which is highly absorbed by water and by biological tissue
- > Depth of penetration is less than 0.5 mm, providing safe tissue ablation
- > Only the target directly in front of the fiber tip interacts with laser radiation

EFFICIENT

- > 20 W Ho:YAG laser can effectively fragment stones regardless of their size, location or chemical composition

COST EFFECTIVE

- > Limiting power to 20 W allows very compact housing with limited heating, hence reducing power consumption, noise and cost



SAFE AND EASY OPERATION

- > Optimum pulse length selection adapting to specific stone and tissue treatment requirements
- > Predefined energy / frequency parameters for simple and optimized laser settings
- > Enhanced procedure and safety system assured with automatic maximum power setting and fiber reuse cycle supervision when using the original EMS SmartFibers
- > Use of EMS SmartFibers avoids fiber overuse and related loss of laser performance or system damage. Also prevents operator errors
- > Integrated easy-to-change blast shield protects the system against damage by misaligned or damaged fibers



- > Trapdoor enables the end-user to replace the blast shield

SHORT OR LONG PULSES ?

PULSE DURATION MAKES THE DIFFERENCE

- > Holmium laser lithotripsy is the reference for flexible ureteroscopy because it is effective on all stones
- > Long pulse mode is adding new benefits compared to the standard short pulse mode
- > Long pulse mode improves fragmentation control by reducing stone migration
- > Long pulse mode reduces laser fiber burn back
- > Efficient tissue haemostasis and cutting in long pulse mode



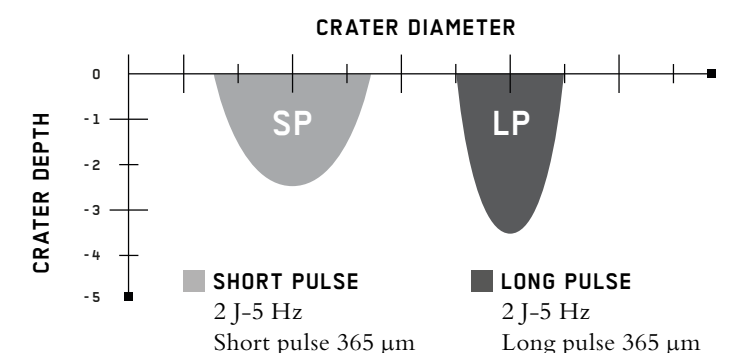
STONE FRAGMENTATION VOLUME IS EQUIVALENT IN SHORT AND LONG PULSE

SHORT PULSES

- > Powerful fragmentation
- > For larger hard stones
- > Fastest fragmentation effect

LONG PULSES

- > Fine fragmentation or dusting
- > Minimized retropulsion
- > No need for baskets
- > Less cladding burn back on fiber
- > Hemostasis and tissue incision



SOURCE: Sroka Ronald et al., Investigation on the impact of pulse duration for laser induced lithotripsy - Proc. SPIE 8926, March 4, 2014

SWISS LASERCLAST®

OPTIMUM POWER AND PULSE DURATION FOR EFFECTIVE
STONE AND SOFT-TISSUE TREATMENTS



TECHNICAL SPECIFICATIONS

DIMENSIONS (H x W x D)	496 mm x 338 mm x 435 mm
WEIGHT	37 kg
CLASSIFICATION	EN-60601-1: Class1 Applied part BF IP 20 (Foot pedal: IP X8) MDD 93/42 EEC: Class IIb
POWER SUPPLY	100-240 VAC / 50-60 Hz
POWER CONSUMPTION	1500 VA
ENERGY OUTPUT	Laser type: Flashlamp Pumped Holmium : YAG Wavelength: 2.1 µm Power: 20 W Energy/pulse: 0.5 - 3.5 J Laser classification (IEC/EN 60825-1): 4
OPERATING MODE	Pulse width: 150 - 1500 µs Repetition rate: 3 - 20 Hz
OPERATING CONDITIONS	Temperature +10°C to +25°C Relative humidity 30 % to 85 % Atmospheric pressure 700 hPa to 1060 hPa Altitude max. 3000 m
STORAGE AND TRANSPORT CONDITIONS	Storage temperature +10°C to +40°C Transport temperature -10°C to +80°C Relative humidity 10 % to 85 % Atmospheric pressure 500 hPa to 1060 hPa
PRIMARY FUSES	T4A 250 V (Ø5 X 20 mm, time lag, low breaking capacity)
AIR SUPPLY	–
AIMING BEAM	Green 532 nm, (adjustable, < 5 mW) Aiming beam classification (IEC/EN 60825-1): 3R



SWISS LASERCLAST®
INCLUDES →

SWISS LASERCLAST® CONTROL UNIT

- 1 Foot pedal
- 2 Safety goggles
- 1 Fiber stripper (0.3 - 1 mm)
- 1 Fiber stripper (0.1 - 0.4 mm)
- 1 Fiber cutter
- 1 Interlock connector
- 1 Filling and draining accessories kit
- 1 Deionized water tank
- 1 Blast shield
- 1 Power supply cable

ORDER NO. FT-211#

- FT-211
- EK-350
- DZ-020
- DT-469
- DT-470
- DT-471
- DT-472
- DT-473
- DV-104
- EP-081
- acc. to country standard

OPTIONS AVAILABLE →

PAGE ORDER NO.

EMS SMARTFIBERS

Userfriendly, safe and effective,
available in 4 sizes

30

ALL-IN-ONE CART

To be used for Swiss LaserClast®,
Swiss LithoClast® Master or Swiss LithoClast® 2,
and Swiss LithoPump®

76

DW-038

WARRANTY EXTENSION

Legal Warranty can be extended for 1 or 2 years

SERVICE CONTRACT

For hassle free maintenance

PULSE DURATION
MAKES THE DIFFERENCE

INTERLOCK CONNECTOR



ORDER NO.

DT-472

FILLING AND DRAINING ACCESSORIES



ORDER NO.

DT-473

DE IONIZED WATER CONTAINER



ORDER NO.

DV-104

SAFETY GOGGLES



ORDER NO.

DZ-020

FIBER STRIPPER (0.1 - 0.4 mm)



ORDER NO.

DT-470

FIBER STRIPPER (0.3 - 1 mm)



ORDER NO.

DT-469

FIBER CUTTER



ORDER NO.

DT-471

BLAST SHIELD

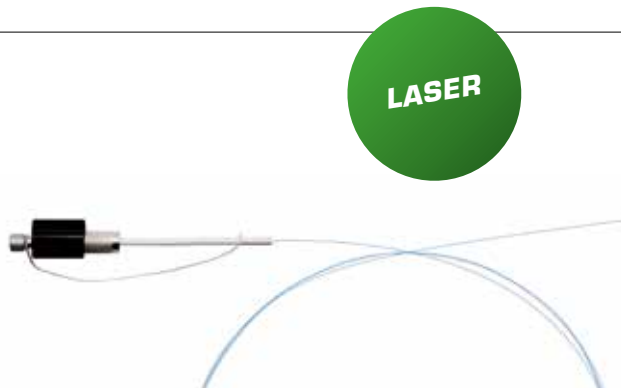


ORDER NO.

EP-081

EMS SMARTFIBERS

SET OF 5 FIBERS



DISPOSABLE LASER FIBERS

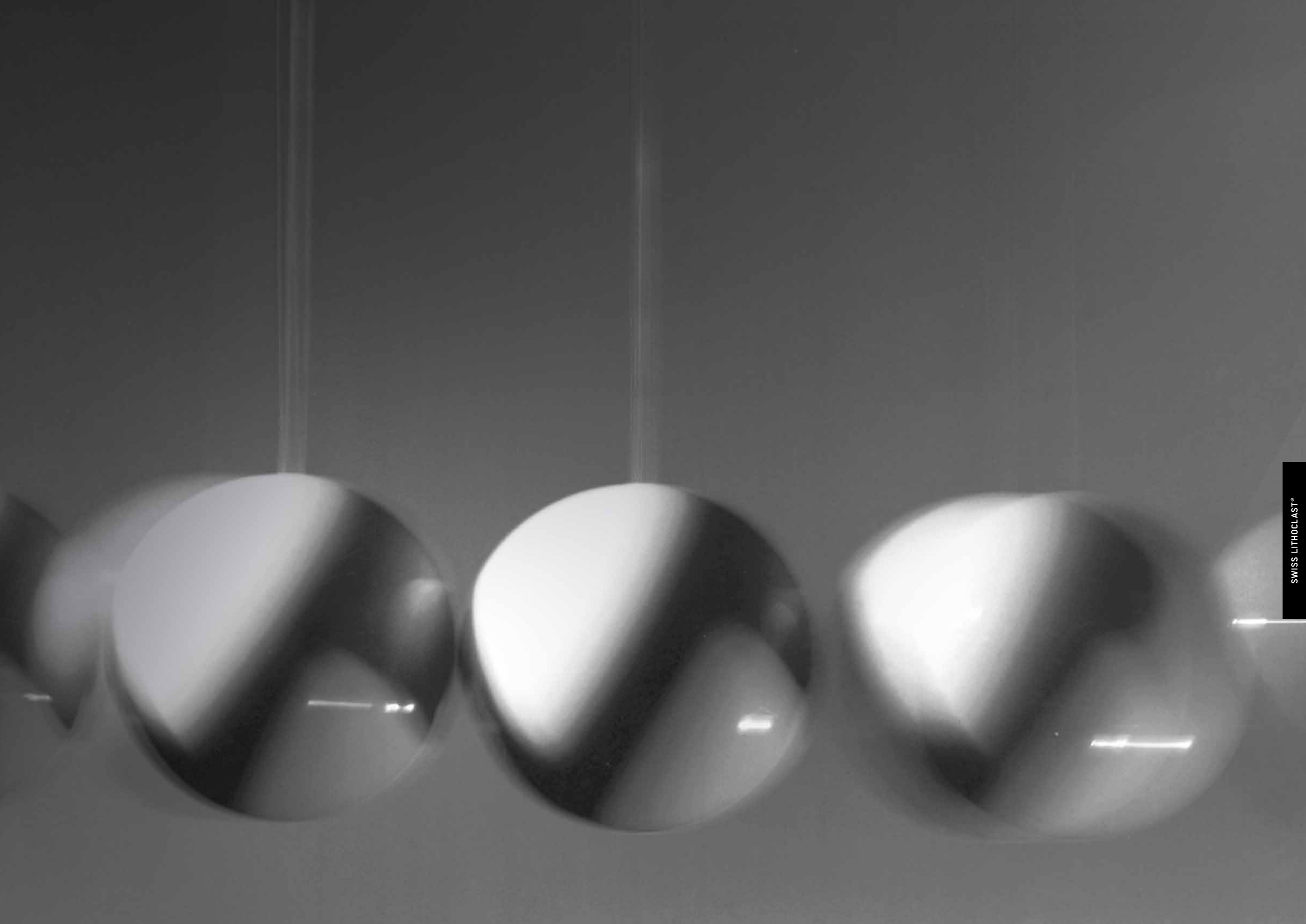
Single use, supplied sterile

DIAMETER (Ø) - (EMS SmartFibers)	LENGTH	ORDER NO.
Ø 200 µm	3 m	FR-177
Ø 272 µm	3 m	FR-185
Ø 365 µm	3 m	FR-179
Ø 550 µm	3 m	FR-181
DIAMETER (Ø) - (EMS SmartFibers Power)		
Ø 200 µm	3 m	FR-272
Ø 272 µm	3 m	FR-273

REUSABLE LASER FIBERS

10 times reusable, supplied sterile

DIAMETER (Ø) - (EMS SmartFibers)	LENGTH	ORDER NO.
Ø 200 µm	3 m	FR-178
Ø 272 µm	3 m	FR-186
Ø 365 µm	3 m	FR-180
Ø 550 µm	3 m	FR-182
DIAMETER (Ø) - (EMS SmartFibers Power)		
Ø 200 µm	3 m	FR-275
Ø 272 µm	3 m	FR-276

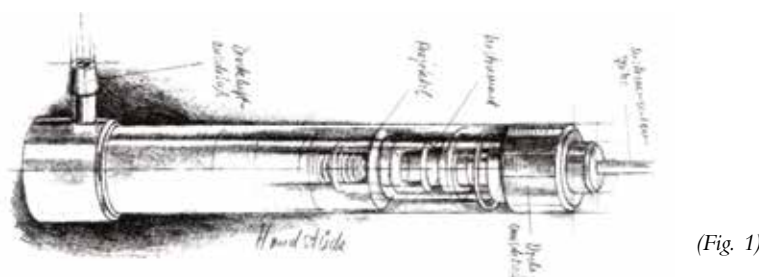


SWISS LITHOCLAST® PRINCIPLE

In 1687 the scientist Sir Isaac Newton established his well-known law of “action and reaction”. The working principle of the Swiss LithoClast® is based on the momentum theorem derived from this law. Perfectly controlled shock waves are transmitted to the calculus through special rigid or flexible probes.

Compressed air is being used to generate ballistic energy in the handpiece of the Swiss LithoClast®. A projectile, precision guided to within of one micrometer, is accelerated to a high speed by means of a precisely controlled burst of compressed air. When the projectile hits the installed probe in the handpiece, a shock wave is transmitted through the probe to the calculus. The different acoustic characteristics of the metal probe and the stone lead to a fast and effective lithotripsy.

The Swiss LithoClast® technology can be perfectly combined with the EMS ultrasonic lithotripsy, the principle of the “Swiss LithoClast® Master”. Faster disintegration of calculi, efficient suction, shorter treatment duration and complete removal of the calculi are the results of this combined application. The Swiss LithoClast® 2 and the Swiss LithoClast® Master can be used with all well-known endoscopes of leading manufacturers for the treatment of renal, ureteral and bladder stones.

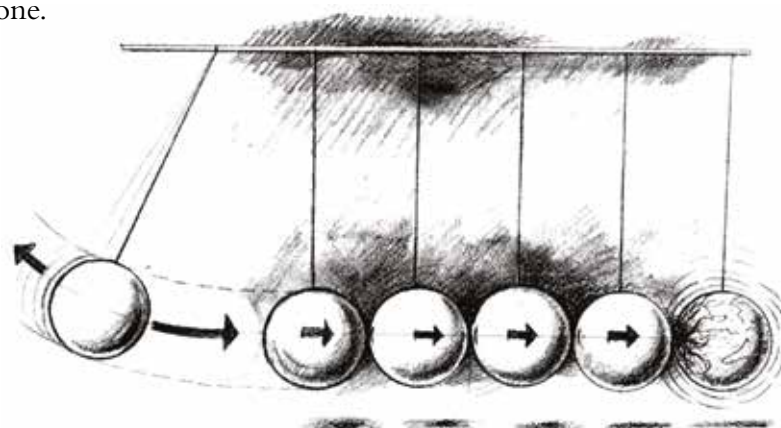


(Fig. 1)

THE WORKING PRINCIPLE

- > The working principle is based on Newton's cradle, demonstrating the transfer of energy between projectile, probe and stone.

(Fig. 1 and Fig. 2)



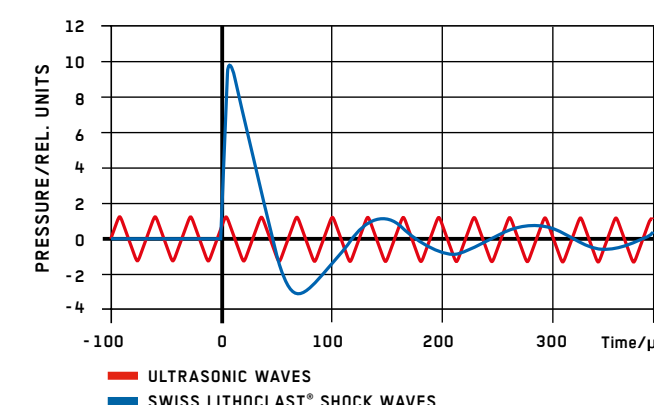
(Fig. 2)

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

THE PRINCIPLE

- > Pneumatic lithotripsy – The Swiss LithoClast® principle is an acclaimed and proven method for coarse stone fragmentation
- > High-performance ultrasonic lithotripsy for fine fragmentation and pulverization
- > Simultaneous use of both technologies for enhanced efficacy
- > Choice of the most effective method during treatment

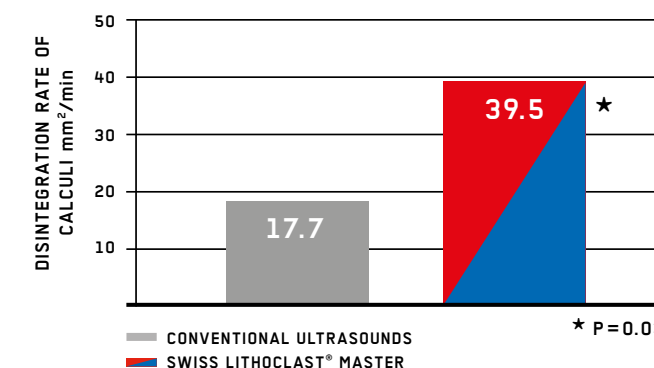
COMPARISON OF SWISS LITHOCLAST® SHOCK WAVES VS
ULTRASONIC WAVES → FORCE ACTING ON THE CALCULUS



THE IMPACT

- > Most effective method for the removal of large calculi
- > Clinically proven faster stone removal: 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

IN VIVO COMPARISON → CONVENTIONAL ULTRASOUND
VS SWISS LITHOCLAST® MASTER PRINCIPLE

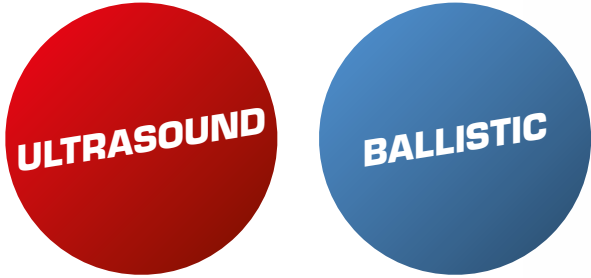


SOURCE

Auge, Pietrow, Preminger et al.,
World Congress of Endourology (Genova 2002)

SWISS LITHOCLAST® MASTER

COMBINED ULTRASONIC AND PNEUMATIC LITHOTRIPSY AT ITS BEST BY THE INVENTOR OF THE SWISS LITHOCLAST® METHOD



TECHNICAL SPECIFICATIONS

DIMENSIONS (H x W x D)	135 mm x 360 mm x 420 mm
WEIGHT	11 kg
CLASSIFICATION	EN-60601-1: Class1 Applied part BF IP 20 (Foot pedal: IP X8) MDD 93/42 EEC: Class IIb
POWER SUPPLY	100-240 VAC / 50-60 Hz
POWER CONSUMPTION	500 VA
ENERGY OUTPUT	Ultrasound: 78 W Ballistic: Approx. 85 mJ
OPERATING MODE	Ultrasound: Continuous mode Ballistic: From 1 to 12 Hz
OPERATING CONDITIONS	Temperature +10°C to +30°C Relative humidity 30 % to 75 % Atmospheric pressure 700 hPa to 1060 hPa Altitude max. 3000 m
STORAGE AND TRANSPORT CONDITIONS	Temperature -10°C to +40°C Relative humidity 10 % to 95 % Atmospheric pressure 500 hPa to 1060 hPa
PRIMARY FUSES	T4A 250 V (Ø5 X 20 mm, time lag, low breaking capacity)
AIR SUPPLY	3.5 to 6.5 bar (3500 to 6500 hPa)



SWISS LITHOCLAST® MASTER INCLUDES →

ORDER NO. **FT-128#**

SWISS LITHOCLAST® MASTER CONTROL UNIT

FT-128

- 1 Holder for stone fragment catcher
- 1 Foot pedal
- 10 Disposable stone catcher
- 2 Spare fuses
- 1 Power supply cable
- 1 Compressed air supply tube

EL-225
EK-166B
DT-059
CE-059

acc. to country standard
acc. to country standard

VARIO ULTRASOUND HANDPIECE KIT

FR-142

- 1 Vario Ultrasound handpiece
- 1 Combination suction connector
- 1 Straight suction connector
- 2 Wrench 5.0 mm
- 2 Wrench 8.0 mm
- 1 Transportation Case

EN-055
EL-378A
EL-379A
DT-098A
DT-100A
DP-358

PN3 PNEUMATIC HANDPIECE KIT

FR-089

- 1 Pn3 pneumatic handpiece
- 1 Adjustment interface
- 1 Probe cap
- 1 Compressed air tubing for handpiece
- 2 Sets of silicone probe guides (12x)
- 20 Silicone seals (disposable)
- 1 Transportation case

EL-175
EL-219
AD-347
EH-096
EQ-062
BE-028
DP-201

SWISS LITHOCLAST® PROBES

- 1 Swiss LithoClast® probe Ø 2.0 x 425 mm (6.0 Fr.)
- 1 Swiss LithoClast® probe Ø 1.0 x 605 mm (3.0 Fr.)
- 1 Swiss LithoClast® probe Ø 0.8 x 605 mm (2.4 Fr.)

EL-044
EL-045
EL-046

Choose the length for combination with ultrasound probe:

- 1 Swiss LithoClast® probe Ø 1.0 x 570 mm (3.0 Fr.)
- or 1 Swiss LithoClast® probe Ø 1.0 x 497 mm (3.0 Fr.)

EL-220
EL-276

ULTRASOUND PROBES (Choose two probes from selection below)

DISPOSABLE

REUSABLE

- 1 Ultrasound probe Ø 3.8 x 403 mm (11.4 Fr.)
- 1 Ultrasound probe Ø 3.3 x 403 mm (9.9 Fr.)
- 1 Ultrasound probe Ø 3.3 x 330 mm (9.9 Fr.)
- 1 Ultrasound probe Ø 3.8 x 330 mm (11.4 Fr.)

FR-083/A
FR-084/A
FR-105/A
FR-106/A

FR-083
FR-084
FR-105
FR-106

OPTIONS AVAILABLE →

SWISS LITHOPUMP®

Dedicated suction solution

PAGE

ORDER NO.

62

FT-184

ALL-IN-ONE CART

To be used for Swiss LithoClast® Master, Swiss LithoPump® and Swiss LaserClast®

76

DW-038

SWISS LITHOCART

To be used for Swiss LithoClast® Master, Swiss LithoPump®

76

DW-030

VARIO ULTRASOUND HANDPIECE UPGRADE KIT

Upgrade your US3 ultrasound system for faster stone clearance

52

FR-159

ULTRASOUND PROBES

Probes for ureteroscopy and mini-perc
Disposable probes for optimum performance case after case

53

SWISS LITHOCLAST® PROBES

Give your system a greater freedom of choice with pneumatic probes of various lengths, diameter and flexibility

56

SWISS LITHOVAC® LV3 KIT AND SUCTION TUBES

Improves fragmentation control, reduces push-back effect

66

**ULTIMATE
STONE THERAPY**

SWISS LITHOCLAST® 2

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



TECHNICAL SPECIFICATIONS

DIMENSIONS (H x W x D)	136 mm x 280 mm x 365 mm
WEIGHT	10.5 kg
CLASSIFICATION	EN-60601-1: Class I IP 20 (Foot pedal: IP X8) MDD 93 /42 EEC: Class IIb
POWER SUPPLY	100-240 VAC / 50-60 Hz
POWER CONSUMPTION	40 VA
ENERGY OUTPUT	Ballistic: Approx. 85 mJ
OPERATING MODE	Ballistic: From 1 to 12 Hz
OPERATING CONDITIONS	Temperature +10°C to +30°C Relative humidity 30 % to 75 % Atmospheric pressure 700 hPa to 1060 hPa Altitude max. 3000 m
STORAGE AND TRANSPORT CONDITIONS	Temperature -10°C to +40°C Relative humidity 10 % to 95 % Atmospheric pressure 500 hPa to 1060 hPa
PRIMARY FUSES	T 1.6 A 250 VAC (Ø5 X 20 mm, time lag, low breaking capacity)
AIR SUPPLY	3.5 to 6.5 bar (3500 to 6500 hPa)



SWISS LITHOCLAST® 2

INCLUDES →

ORDER NO. **FT-158#**

SWISS LITHOCLAST® 2 CONTROL UNIT

1 Foot pedal	FT-158
2 Spare fuses	EK-216A
1 Set of connectors for exhaust	CE-068
1 Power supply cable	EQ-113
1 Compressed air supply tube	acc. to country standard
	acc. to country standard

PN3 PNEUMATIC HANDPIECE KIT

1 Pn3 pneumatic handpiece	FR-089
1 Adjustment interface	EL-175
1 Probe cap	EL-219
1 Compressed air tubing for handpiece	AD-347
2 Sets of silicone probe guides (12x)	EH-096
20 Silicone seals (disposable)	EQ-062
1 Transportation case	BE-028
	DP-201

SWISS LITHOCLAST® PROBES

1 Swiss LithoClast® probe Ø 2.0 x 425 mm (6.0 Fr.)	EL-044
1 Swiss LithoClast® probe Ø 1.0 x 605 mm (3.0 Fr.)	EL-045
1 Swiss LithoClast® probe Ø 0.8 x 605 mm (2.4 Fr.)	EL-046
1 Swiss LithoClast® probe Ø 1.6 x 605 mm (4.8 Fr.)	EL-058

OPTIONS

AVAILABLE →

SWISS LITHOVAC® LV3 KIT AND SUCTION TUBES

Improves fragmentation control and reduces push-back effect	66
-------------------------------------------------------------	----

SWISS LITHOPUMP®

Dedicated suction solution	62	FT-184
----------------------------	----	---------------

ALL-IN-ONE CART

To be used for Swiss LithoClast® 2, Swiss LithoPump® and Swiss LaserClast®	76	DW-038
----------------------------------------------------------------------------	----	---------------

SWISS LITHOCART

To be used for Swiss LithoClast® 2, Swiss LithoPump®	76	DW-030
------------------------------------------------------	----	---------------

SWISS LITHOCLAST® PROBES

Give your system a greater freedom of choice with pneumatic probes of various lengths, diameter and flexibility	56
-----------------------------------------------------------------------------------------------------------------	----

STONE CATCHER

Automatic stone fragment collector (disposable or reusable)	67
-------------------------------------------------------------	----

STERILIZATION CONTAINER

For Swiss LithoClast® components	73	FR-112
----------------------------------	----	---------------

STANDARD
IN EFFECTIVENESS

SWISS LITHOBREAKER®

CORDLESS AND PORTABLE
WITH HIGH IMPULSE CAPACITY



TECHNICAL SPECIFICATIONS

DIMENSIONS (H x W x D)	Length: 205 mm x Diameter: 39 mm
WEIGHT	480 g
CLASSIFICATION	EN-60601-1: Internally Powered Medical Equipment IP 68 MDD 93 /42 EEC: Class IIb
POWER SUPPLY	4 rechargeable batteries type AAA NiMH HR03 1.2Volt and 800 mAh or 4 disposable batteries type AAA LR03 1.5Volt
POWER CONSUMPTION	–
ENERGY OUTPUT	Ballistic: Approx. 85 mJ
OPERATING MODE	3 Hz +/- 1 Hz
OPERATING CONDITIONS	Temperature +10°C to +27°C Relative humidity 30 % to 75 % Atmospheric pressure 700 hPa to 1060 hPa Altitude max. 3000 m
STORAGE AND TRANSPORT CONDITIONS	Temperature -10°C to +40°C Relative humidity 10 % to 95 % Atmospheric pressure 500 hPa to 1060 hPa



SWISS LITHOBREAKER® INCLUDES →

ORDER NO. **FT-206#**

SWISS LITHOBREAKER® CONTROL UNIT

- 1 End cap
- 1 Power pack
- 1 AAA rechargeable batteries (4x)
- 1 Power pack insertion funnel
- 1 Sterilization cap
- 1 O-ring set for sterilization cap
- 2 Bags of silicone probe guides for Swiss LithoBreaker® (12x)
- 1 O-ring kit for Swiss LithoBreaker®

FT-206W/A
AG-123A/A
EL-441
CA-244
AD-701A
EL-479A
DT-127
EL-462
DT-466

SWISS LITHOBREAKER® PROBES (CHOOSE OF 1 PROBE)

- 1 Swiss LithoBreaker® probe Ø 2.0 x 425 mm (6.0 Fr.)
- 1 Swiss LithoBreaker® probe Ø 1.0 x 605 mm (3.0 Fr.)
- 1 Swiss LithoBreaker® probe Ø 0.8 x 605 mm (2.4 Fr.)
- 1 Swiss LithoBreaker® probe Ø 1.6 x 605 mm (4.8 Fr.)

EL-044/A
EL-045/A
EL-046/A
EL-058/A

OPTIONS AVAILABLE →

BATTERY CHARGER

Desktop charger for NiMH batteries
with power supply adapter

PAGE 47 ORDER NO. **EK-325**

SWISS LITHOBREAKER® PROBES

Give your system a greater freedom of choice with
pneumatic probes of various lengths, diameter and flexibility

57

TRANSPORTATION CASE

Store and protect the complete system

47 **DP-411**

STERILE DRAPES

Use the device at any time without sterilization process

47 **DT-468**

SWISS LITHOVAC® LV3 KIT AND SUCTION TUBES

Improves fragmentation control and
reduces push-back effect

66

NEVER RUNS OUT OF GAS

STERILIZATION CAP



ORDER NO.
EL-479A

POWER PACK INSERTION FUNNEL



ORDER NO.
AD-701A

POWER PACK



ORDER NO.
FR-176

PROBE CAP



ORDER NO.
Ø 0.8 - 2 mm probes **EL-475**

BATTERY CHARGER



ORDER NO.
Rechargeable Batteries 4x **CA-244**
Battery charger **EK-325**

SILICONE PROBE GUIDES



ORDER NO.
12x included **EL-462**

STERILE DRAPES



ORDER NO.
25x included **DT-468**

TRANSPORTATION CASE



ORDER NO.
DP-411



VARIO ULTRASOUND HANDPIECE

HIGH PERFORMANCE AND ERGONOMICS



VARIO ULTRASOUND HANDPIECE KIT INCLUDES →

- 1 Vario Ultrasound handpiece
- 1 Combination suction connector
- 1 Straight suction connector
- 2 Wrench 5.0 mm
- 2 Wrench 8.0 mm
- 1 Transportation case

ORDER NO. **FR-142#**

EN-055
EL-378A
EL-379A
DT-098A
DT-100A
DP-358

**EFFECTIVE
STONE CLEARANCE**

VARIO ULTRASOUND HANDPIECE



ORDER NO.
EN-055

NOSE FOR VARIO ULTRASOUND HANDPIECE



ORDER NO.
AD-584

COMBINATION SUCTION CONNECTOR



ORDER NO.
FR-150

STRAIGHT SUCTION CONNECTOR



ORDER NO.
FR-151

ULTRASOUND PROBE WRENCHES



ORDER NO.
5 mm **DT-098A**
8 mm **DT-100A**

CLOSING CAP



ORDER NO.
BF-121

O-RINGS



ORDER NO.
O-Rings Ø 6 x 1.5 mm **BC-193**
O-Rings Ø 19.1 x 1.6 mm **BC-188**

TRANSPORTATION CASE



ORDER NO.
DP-358

VARIO ULTRASOUND HANDPIECE UPGRADE KIT

FASTER STONE CLEARANCE, LESS BLOCKAGE

ULTRA-
SOUND



SWISS LITHOCLAST® MASTER VARIO ULTRASOUND HANDPIECE UPGRADE KIT INCLUDES →

SWISS LITHOCLAST® MASTER VARIO ULTRASOUND HANDPIECE UPGRADE KIT

- 1 Vario Ultrasound handpiece
- 1 Combination suction connector
- 1 Straight suction connector
- 2 Wrench 5.0 mm
- 2 Wrench 8.0 mm
- 1 Transportation Case
- 1 Software Processor Revision 3
- 1 Processor Extractor Kit
- 1 Wrench for Torx screw 20
- 1 "Void" Label
- 1 Customer Information Letter
- 1 Instruction manual Vario Ultrasound handpiece
- 1 Reprocessing Instruction medical
- 1 Quicktable Preparation/reprocessing for Vario Ultrasound and Pn3 pneumatic handpiece
- 1 Software installation instruction
- 1 Software installation DVD

ORDER NO. **FR-159#**

FR-159

EN-055
EL-378A
EL-379A
DT-098A
DT-100A
DP-358
CA-158B
DT-101
DT-075
DQ-316
FA-290
FB-389/3
FB-390/3

FB-418/3
FM-034/EN
FM-035/EN

ULTRASOUND PROBES

FOR US3 AND VARIO HANDPIECES

ULTRA-
SOUND



DISPOSABLE PROBES

Single use, supplied sterile

DIAMETER (Ø)	LENGTH *	ORDER NO.
Ø 3.8 mm (11.4 Fr.)	403 mm	FR-083/A
Ø 3.8 mm (11.4 Fr.)	330 mm	FR-106/A
Ø 3.3 mm (9.9 Fr.)	403 mm	FR-084/A
Ø 3.3 mm (9.9 Fr.)	330 mm	FR-105/A
Ø 1.9 mm (5.7 Fr.) - <i>For Mini-Perc</i>	360 mm	FR-103/A
Ø 1.5 mm (4.5 Fr.) - <i>For Ureteroscopy</i>	573 mm	FR-102/A

REUSABLE PROBES

Recommended for 5 uses, supplied with cleaning brush or rod

DIAMETER (Ø)	LENGTH *	ORDER NO.
Ø 3.8 mm (11.4 Fr.)	403 mm	FR-083
Ø 3.8 mm (11.4 Fr.)	330 mm	FR-106
Ø 3.3 mm (9.9 Fr.)	403 mm	FR-084
Ø 3.3 mm (9.9 Fr.)	330 mm	FR-105

*** INDICATED IS THE NOMINAL LENGTH**

To calculate the effective ultrasound probe length (the introduction length into the endoscope), subtract 10 mm of the indicated length of each probe.

PN3 PNEUMATIC HANDPIECE

ACCLAIMED AND PROVEN
SWISS LITHOCLAST® PRINCIPLE

BALLISTIC



PN3 PNEUMATIC HANDPIECE KIT INCLUDES →

- 1 Pn3 pneumatic handpiece
- 1 Adjustment interface
- 1 Probe cap
- 1 Compressed air tubing for handpiece
- 2 Sets of silicone probe guides (12x)
- 20 Silicone seals (disposable)
- 1 Transportation case

ORDER NO. **FR-089#**

EL-175
EL-219
AD-347
EH-096
EQ-062
BE-028
DP-201

SUCCESS BY DESIGN

PN3 PNEUMATIC HANDPIECE



Only available within Kit FR-089#
ORDER NO. **EL-175**

COMPRESSED AIR TUBING



With connector ORDER NO. **EH-096**
Without connector **BG-075**

PROBE CAP



For Ø 0.8 - Ø 2.0 mm probes ORDER NO. **AD-347**
For the Ø 3.2 mm probe **AD-425**

ADJUSTMENT INTERFACE



Adjustment interface ORDER NO. **EL-219**
O-Rings for adjustment interface (6x) **EQ-094**

SILICONE PROBE GUIDES



12x included ORDER NO. **EQ-062**

SILICONE SEALS



20x included ORDER NO. **BE-028**

CLOSING CAP



For Pn3 connector ORDER NO. **BF-121**

TRANSPORTATION CASE



ORDER NO. **DP-201**

SWISS LITHOCLAST® PROBES

FOR ALL SWISS LITHOCLAST® PNEUMATIC HANDPIECES

BALLISTIC



SWISS LITHOCLAST® PROBES

Supplied with silicone probe guide EQ-162

DIAMETER (Ø)	LENGTH *	ORDER NO.
Ø 3.2 mm (9.6 Fr.) <i>Note: Specific probe cap AD-425 is required</i>	425 mm	EL-092
Ø 2.0 mm (6.0 Fr.) <i>Note: Compatible with Swiss LithoVac® LV3 suction tube EL-211</i>	425 mm	EL-044
Ø 1.6 mm (4.8 Fr.)	605 mm	EL-058
Ø 1.6 mm (4.8 Fr.) <i>Note: Compatible with Swiss LithoVac® LV3 suction tube EL-212</i>	453 mm	EL-081
Ø 1.3 mm (3.9 Fr.) <i>Note: Combination with ultrasound probe FR-083</i>	570 mm	EL-255
Ø 1.3 mm (3.9 Fr.) - For Mini-Perc	410 mm	EL-535
Ø 1.0 mm (3.0 Fr.)	605 mm	EL-045
Ø 1.0 mm (3.0 Fr.) <i>Note: Combination with ultrasound probes FR-083 and FR-084</i>	570 mm	EL-220
Ø 1.0 mm (3.0 Fr.) <i>Note: Combination with ultrasound probes FR-105 and FR-106</i>	497 mm	EL-276
Ø 0.8 mm (2.4 Fr.) <i>Note: Compatible with Swiss LithoVac® LV3 suction tube EL-213</i>	668 mm	EL-080
Ø 0.8 mm (2.4 Fr.)	605 mm	EL-046
Ø 0.8 mm (2.4 Fr.) - For Mini-Perc	410 mm	EL-552

★ INDICATED IS THE NOMINAL LENGTH

To calculate the effective pneumatic probe length (the introduction length into the endoscope), subtract 43 mm of the indicated length of each probe.

SWISS LITHOBREAKER® PROBES

FOR SWISS LITHOBREAKER®

BALLISTIC



SWISS LITHOBREAKER® PROBES

Supplied with silicone probe guide EL-462

DIAMETER (Ø)	LENGTH *	ORDER NO.
Ø 3.2 mm (9.6 Fr.) <i>Note: Specific probe cap AD-425 is required</i>	425 mm	EL-092/A
Ø 2.0 mm (6.0 Fr.) <i>Note: Compatible with Swiss LithoVac® LV3 suction tube EL-211</i>	425 mm	EL-044/A
Ø 1.6 mm (4.8 Fr.)	605 mm	EL-058/A
Ø 1.6 mm (4.8 Fr.) <i>Note: Compatible with Swiss LithoVac® LV3 suction tube EL-212</i>	453 mm	EL-081/A
Ø 1.0 mm (3.0 Fr.)	605 mm	EL-045/A
Ø 0.8 mm (2.4 Fr.)	605 mm	EL-046/A
Ø 0.8 mm (2.4 Fr.) <i>Note: Compatible with Swiss LithoVac® LV3 suction tube EL-213</i>	668 mm	EL-080/A

★ INDICATED IS THE NOMINAL LENGTH

To calculate the effective pneumatic probe length (the introduction length into the endoscope), subtract 43 mm of the indicated length of each probe.

SWISS LITHOCLAST® FLEXIBLE PROBES

SET OF 3 PROBES



BALLISTIC

SWISS LITHOCLAST® FLEXIBLE PROBES

To be used with pneumatic Pn3 handpiece EL-175

DIAMETER (Ø)	LENGTH ★	ORDER NO.
Ø 0.89 mm (2.7 Fr.)	940 mm	EL-254B
Ø 0.89 mm (2.7 Fr.)	600 mm	EL-304B

SWISS LITHOCLAST® FLEXIBLE PROBES

To be used with pneumatic handpiece EL-043

DIAMETER (Ø)	LENGTH ★	ORDER NO.
Ø 0.89 mm (2.7 Fr.)	940 mm	EL-298B

SWISS LITHOCLAST® FLEXIBLE PROBES

To be used with pneumatic Master handpiece EL-103

DIAMETER (Ø)	LENGTH ★	ORDER NO.
Ø 0.89 mm (2.7 Fr.)	940 mm	EL-299B

★ INDICATED IS THE NOMINAL LENGTH

To calculate the effective pneumatic probe length (the introduction length into the endoscope), subtract 43 mm of the indicated length of each probe.



SWISS LITHOPUMP®

A DEDICATED SUCTION SOLUTION FOR LITHOTRIPSY PROCEDURES



ERGONOMIC AND EASY TO SWITCH



TECHNICAL SPECIFICATIONS

DIMENSIONS (H x W x D)	77 mm x 280 mm x 380 mm
WEIGHT	4.8 kg
CLASSIFICATION	MDD 93 /42 EEC: Class IIa
SUCTION PRESSURE	From 0 to -0.8 bar (-80 kPa)
OPERATING CONDITIONS	Temperature +10°C to +30°C Relative humidity 30 % to 75 % Atmospheric pressure 700 hPa to 1060 hPa Altitude max. 3000 m
STORAGE AND TRANSPORT CONDITIONS	Temperature -10°C to +40°C Relative humidity 10 % to 95 % Atmospheric pressure 500 hPa to 1060 hPa
AIR SUPPLY	3.5 to 6.5 bar (3500 to 6500 hPa)

SWISS
LITHOPUMP® →

ORDER NO. FT-184#

SWISS LITHOPUMP® CONTROL UNIT

- 1 Compressed air connection
- 1 Connection Set
- 1 Set of connectors for exhaust

- 1 Overflow protection filters set (10x)
With Medela® connection
or
With conical connection

FT-184
EH-120
FR-144
EQ-113

DT-096
DT-108

OPTIONS AVAILABLE →

FLUID MANAGEMENT SYSTEM BY:



DOUBLE REUSABLE SUCTION JAR SET 2,0 L

INCLUDES

- EP-036 (2x)
- EG-088 (1x)
- EP-038 (2x)
- FR-144 (2x)
- 180 cm tube



ORDER NO.
EP-035

CART FOR SUCTION JAR



ORDER NO.
DW-031

DISPOSABLE SUCTION BAGS 2,5 L



40x included
ORDER NO.
DT-097

SUCTION JAR FOR DISPOSABLE BAG DT-097



ORDER NO.
EP-037

AUTOCLAVABLE SUCTION JAR 2,0 L



ORDER NO.
EP-036

OVERFLOW PROTECTION FILTERS



ORDER NO.
Medela® connection 10x included DT-096
Conical connection 10x included DT-108

CHANGE OVER VALVE



ORDER NO.
EG-088

CLAMP HOLDER



ORDER NO.
EP-038

CONNECTION SET



ORDER NO.
FR-144

COMPRESSED AIR SUPPLY CONNECTION



ORDER NO.
EH-120

SWISS LITHOVAC® LV3

FOR EVACUATION OF STONE FRAGMENTS
AND BETTER FRAGMENTATION CONTROL



SWISS LITHOVAC® LV3 KIT INCLUDES →

- 1 Swiss LithoVac® LV3 body with adjustment interface EL-219 EL-182
- 1 Suction Kit with silicone tube and connector EL-237

ORDER NO. **FR-127#**

SUCTION TUBES

For Swiss LithoVac® LV3



DIAMETER	LENGTH	ORDER NO.
Ø 4.0 mm (12.0 Fr.)	353 mm★	EL-211
Ø 3.5 mm (10.5 Fr.)	380 mm★	EL-212
Ø 1.6 mm (4.8 Fr.)	595 mm★	EL-213

★ INDICATED IS THE NOMINAL LENGTH

To calculate the effective Swiss LithoVac® LV3 suction tube length (the introduction length into the endoscope), subtract 18 mm of the indicated length of each tube.



STONE CATCHER

AUTOMATIC FRAGMENT COLLECTOR

STONE FRAGMENT CATCHERS STERILE KIT

For Swiss LithoClast®
and Swiss LithoClast® Master



10x included
ORDER NO. **DT-059**

STONE CATCHER ACL

Stone fragment catcher for the Swiss LithoClast® Master autoclable, reuseable in combination with disposable suction tubing, sterile, with conical fitting (such as FR-091/4)



ORDER NO. **FR-125**

STONE FRAGMENT CATCHER HOLDER



For Swiss LithoClast® Master
ORDER NO. **EL-225**

STONE FRAGMENT CATCHER HOLDER KIT



For Swiss LithoClast® 2
ORDER NO. **FR-126**

SUCTION TUBING, STERILE, LENGTH 3 M



30x included
ORDER NO. **FR-091/4**

ROLLER CLAMP



2x included
ORDER NO. **FR-113**



UNIVERSAL CYSTO-/ NEPHROSCOPE KIT PANOVIEW PLUS PARALLEL VIEW TELESCOPE

BY RICHARD WOLF



TECHNICAL SPECIFICATIONS

- > Shaft length 224 mm
- > Working channel fluid seal system with hollow obturator (for guidewire insertion)
- > Stainless steel endoscope and irrigation attachment
- > Cleaning disinfection maximum pH 10
- > Steam sterilization parameters 134°C, 5 min., fractioned process

REFERENCES	FR-082
SHAFT DIAMETER	24 Fr.
STRAIGHT WORKING CHANNEL (OVAL)	10.5 Fr. (3.5 mm)
VIEWING ANGLE	20°

COMPACT OPERATING FIBER URETERORENOSCOPE

BY RICHARD WOLF



TECHNICAL SPECIFICATIONS

- > Shaft length 430 mm
- > Maximum allowed sheath bending 15°
- > Working channel fluid seal system with flat seal
- > Stainless steel endoscope and irrigation attachment
- > Cleaning disinfection maximum pH 10
- > Steam sterilization parameters 134°C, 5 min., fractioned process

REFERENCES	FR-107	FR-108
SHAFT DIAMETER	8 / 9.8 Fr.	6 / 7.5 Fr.
STRAIGHT WORKING CHANNEL (OVAL)	1x 5 Fr. or 2x 3 Fr.	1x 4 Fr.
OPTICAL FIBER RESOLUTION	50'000 px	20'000 px
VIEWING ANGLE	12°	5°

ADAPTERS FOR ENDOSCOPES

FOR EMS HANDPIECES



FOR VARIO ULTRASOUND HANDPIECE



ADAPTER	ORDER NO.
For EMS Lithovision ureterorenoscope FR-167 and FR-168	FR-187
For Richard Wolf ureterorenoscope FR-107, FR-108 and FR-132	FR-212
For Olympus OES Pro Serie ureterorenoscope WA29042A with irrigation attachment A0396	FR-210

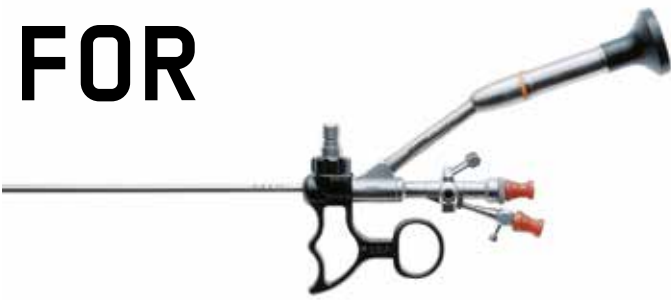
FOR PN3 PNEUMATIC HANDPIECE



ADAPTER	ORDER NO.
For EMS Lithovision ureterorenoscope FR-167 and FR-168	FR-172
For Richard Wolf ureterorenoscope FR-107, FR-108 and FR-132	FR-114
For Olympus OES Pro Serie ureterorenoscope WA29042A with irrigation attachment A0396	FR-211

ACCESSORIES FOR ENDOSCOPES

BY RICHARD WOLF



HANDLE WITH OVERLOAD PROTECTION

Required for forceps
inserts FR-134, FR-135, FR-136



ORDER NO.
FR-133

GRASPING FORCEPS INSERT 5 FR. / 550 mm

With mouse jaws for ureterorenoscope
FR-107 (handle FR-133 required)



ORDER NO.
FR-134

GRASPING FORCEPS INSERT 4 FR. / 550 mm

With mouse jaws
for ureterorenoscope
FR-108 and FR-132
(handle FR-133 required)



ORDER NO.
FR-135

GRASPING FORCEPS INSERT 10.5 FR. / 340 mm

With aligator jaws for cysto / nephroscope
FR-082 (handle FR-133 required)



ORDER NO.
FR-136

ENDOSCOPE HOLDER

For FR-107 / FR-108 / FR-132



ORDER NO.
FR-109

AUTOCLAVABLE STERILIZATION CONTAINER



Sterilization tray 700x120x75 mm,
for FR-107 and FR-108

ORDER NO.
FR-112

Sterilization tray 500x200x60 mm,
for FR-082

FR-166



SWISS LITHOCLAST® TRILOGY CART



To be used for Swiss LithoClast® Trilogy. Allow storage of foot pedal and electrical cords

ORDER NO.
DW - 047

ALL-IN-ONE CART



To be used for Swiss LaserClast®, Swiss LithoClast® Master or Swiss LithoClast® 2. Allows storage of compressor, Swiss LithoPump® and suction containers

ORDER NO.
DW - 038

SWISS LITHOCART



To be used for Swiss LithoClast® Master or Swiss LithoClast® 2. Allows storage of compressor, Swiss LithoPump® and suction containers

ORDER NO.
DW - 030

TRANSPORTATION HARD CASE



Swiss LithoClast® Trilogy	ORDER NO. DP - 508/1
Swiss LithoClast® Trilogy accessories	DP - 508/2
Swiss LithoClast® Trilogy probes	DP - 508/3
Swiss LithoClast® Master	DP - 199
Swiss LithoClast® 2	DP - 295
Swiss LaserClast®	DP - 487

FOOT PEDAL



For Swiss LithoClast® Trilogy

ORDER NO.
EK - 386A

FOOT PEDAL



For Swiss LithoClast® Master

ORDER NO.
3 m EK - 166B
6 m EK - 166A

FOOT PEDAL



For Swiss LithoClast® 2


ORDER NO.
EK - 216A

FOOT PEDAL



For Swiss LaserClast®

ORDER NO.
EK - 350

ACCESSORIES		
POWER CORD FOR SWISS LITHOCLAST® TRILOGY		
CONNECTOR TYPE	LENGTH	ORDER NO.
Hospital Grade	6.0 m	CD-149
Switzerland	6.0 m	CD-150
Brazil	6.0 m	CD-151
Japan	6.0 m	CD-152
China	6.0 m	CD-153
UK	6.0 m	CD-154
POWER CORD FOR SWISS LITHOCLAST® MASTER		
CONNECTOR TYPE	LENGTH	ORDER NO.
Switzerland	3.0 m	CD-010
Europe	3.0 m	CD-012
USA / Japan	3.0 m	CD-018
UK	2.5 m	CD-111
Brazil	2.5 m	CD-130
POWER CORD FOR SWISS LITHOCLAST® 2		
CONNECTOR TYPE	LENGTH	ORDER NO.
Switzerland	3.0 m	CD-092
USA	3.0 m	CD-093
Europe	3.0 m	CD-094
Japan	3.0 m	CD-095
China	2.5 m	CD-105
United Kingdom	2.5 m	CD-111
Brazil	2.5 m	CD-130
POWER CORD FOR SWISS LASERCLAST®		
CONNECTOR TYPE	LENGTH	ORDER NO.
Switzerland	3.0 m	CD-119
Europe	3.0 m	CD-120
UK	3.0 m	CD-121
Hospital Grade	3.0 m	CD-122
China	3.0 m	CD-123
Brazil	3.0 m	CD-131
COMPRESSED AIR TUBING		
CONNECTOR TYPE	LENGTH	ORDER NO.
EMS Compressor	1.0 m	EH-085
EMS Compressor	3.0 m	EH-086
Draeger	5.0 m	EH-091
France	3.0 m	EH-092
Without connector	6.0 m	EH-101
COMPRESSOR		
For compressed air (medical quality) 8 bar / 4 l		
		
ORDER NO.		
220 V DW-007		
110 V DW-010		

COMBINATION MODALITY

For bladder and kidney stones



Ultrasound probe				Pneumatic probe			
ORDER NO.	DIAMETER (Ø)	LENGTH	WITH / OR	ORDER NO.	DIAMETER (Ø)	LENGTH	WORKING CHANNEL* USAGE**
FR-083/A	Ø 3.8 mm	403 mm	with	EL-220	Ø 1.0 mm	570 mm	12 Fr. B/K
			or	EL-255	Ø 1.3 mm	570 mm	12 Fr. B/K
FR-084/A	Ø 3.3 mm	403 mm	with	EL-220	Ø 1.0 mm	570 mm	10.5 Fr. B/K
FR-106/A	Ø 3.8 mm	330 mm	with	EL-276	Ø 1.0 mm	497 mm	12 Fr. B/K
FR-105/A	Ø 3.3 mm	330 mm	with	EL-276	Ø 1.0 mm	497 mm	10.5 Fr. B/K

PNEUMATIC ONLY MODALITY

For bladder, kidney and ureter stones



ORDER NO.	DIAMETER (Ø)	LENGTH	WORKING CHANNEL*	USAGE**	NOTES
EL-092	Ø 3.2 mm	425 mm	10 Fr.	B/K	Specific probe cap AD-425 is required
EL-044	Ø 2.0 mm	425 mm	6.0 Fr.	B/K	Compatible with Swiss LithoVac® LV3 tube EL-211 / Ø 4.0 mm x 355 mm, for 12 Fr. working channel
EL-058	Ø 1.6 mm	605 mm	5.0 Fr.	U	
EL-081	Ø 1.6 mm	453 mm	5.0 Fr.	B/K	Compatible with Swiss LithoVac® LV3 tube EL-212 / Ø 3.5 mm x 380 mm, for 10 Fr. working channel
EL-535	Ø 1.3 mm	410 mm	4.0 Fr.	MP	For Richard Wolf mini-nephroscope
EL-045	Ø 1.0 mm	605 mm	3.0 Fr.	U	
EL-254	Ø 0.89 mm	940 mm	3.0 Fr.	B/K	For Pn3 handpiece EL-175 (flexible probe)
EL-298	Ø 0.89 mm	940 mm	3.0 Fr.	B/K	For handpiece EL-043 (flexible probe)
EL-299	Ø 0.89 mm	940 mm	3.0 Fr.	B/K	For handpiece EL-103 (flexible probe)
EL-304	Ø 0.89 mm	600 mm	3.0 Fr.	B/K	For Pn3 handpiece EL-175 (flexible probe)
EL-080	Ø 0.8 mm	668 mm	2.4 Fr.	U	Compatible with Swiss LithoVac® LV3 tube EL-213 / Ø 1.6 mm x 595 mm, for 5.0 Fr. working channel
EL-046	Ø 0.8 mm	605 mm	2.4 Fr.	U	
EL-552	Ø 0.8 mm	410 mm	2.4 Fr.	MP	For Karl Storz mini-nephroscope

ULTRASOUND ONLY MODALITY

For bladder, kidney and ureter stones



ORDER NO.	DIAMETER (Ø)	LENGTH	WORKING CHANNEL*	USAGE**
FR-083/A	Ø 3.8 mm	403 mm	12 Fr.	B/K
FR-106/A	Ø 3.8 mm	330 mm	12 Fr.	B/K
FR-084/A	Ø 3.3 mm	403 mm	10.5 Fr.	B/K
FR-105/A	Ø 3.3 mm	330 mm	10.5 Fr.	B/K
FR-103/A	Ø 1.9 mm	360 mm	6.0 Fr.	MP/P
FR-102/A	Ø 1.5 mm	573 mm	5.0 Fr.	U

SWISS LITHOVAC® LV3

For pneumatic only



Swiss LithoVac® LV3 tube				Pneumatic probe			
ORDER NO.	DIAMETER (Ø)	LENGTH	WITH	ORDER NO.	DIAMETER (Ø)	LENGTH	WORKING CHANNEL* USAGE**
EL-211	Ø 4.0 mm	353 mm	with	EL-044	Ø 2.0 mm	425 mm	12 Fr. K
EL-212	Ø 3.5 mm	380 mm	with	EL-081	Ø 1.6 mm	453 mm	10.5 Fr. B/K
EL-213	Ø 1.6 mm	595 mm	with	EL-080	Ø 0.8 mm	668 mm	5.0 Fr. U

SUCTION STRENGTH

For ultrasound only and Swiss LithoVac® LV3



USAGE**	SUCTION PRESSURE
B/K	Up to - 0.4 bar
U	Up to - 0.7 bar


















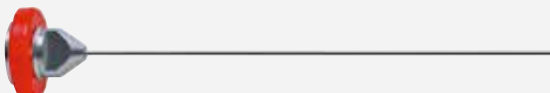
/A = Availabe as sterile pack for disposable
* Fr. = French Gauge (1 mm = 3 Fr.)
** B = Bladder K = Kidney U = Ureter MP = Mini-PNL P = Paediatric

/A = Availabe as sterile pack for disposable
* Fr. = French Gauge (1 mm = 3 Fr.)
** B = Bladder K = Kidney U = Ureter MP = Mini-PNL P = Paediatric

THE RIGHT SIZE FOR EACH PROCEDURE

SWISS LITHOCLAST® TRILOGY PROBES SELECTOR



PROCEDURE	SCOPE TYPE	TAG RING PROBE COLOR	SWISS LITHOCLAST® TRILOGY SINGLE-USE PROBES	PROBE DIAMETER AND LENGTH	MINIMUM ENDOSCOPE WORKING CHANNEL DIAMETER	MAXIMUM ENDOSCOPE WORKING CHANNEL LENGTH	REFERENCE
PCNL	30 Fr Nephroscope (short)	Blue	 	3.9 mm x 350 mm	12 Fr	330 mm	FR-245
PCNL	30 Fr Nephroscope (long)	Blue	 	3.9 mm x 440 mm	12 Fr	420 mm	FR-246
PCNL	24 Fr Nephroscope (short)	Green	 	3.4 mm x 340 mm	10.5 Fr	320 mm	FR-247
PCNL	24 Fr Nephroscope (long)	Green	 	3.4 mm x 445 mm	10.5 Fr	420 mm	FR-248
Mini PCNL	Mininephroscope type R Wolf / Olympus	Yellow	 	1.9 mm x 341 mm	6 Fr	320 mm	FR-249
Mini PCNL	Mininephroscope type Storz MIP-M	Orange	 	1.5 mm x 440 mm	5 Fr	400 mm	FR-250
Mini PCNL	Mininephroscope	Red	 	1.1 mm x 425 mm	4 Fr	400 mm	FR-252
URS	Semirigid ureteroscope	Red	 	1.1 mm x 520 mm	4 Fr	500 mm	FR-253
URS	Semirigid ureteroscope	Red	 	1.1 mm x 625 mm	4 Fr	600 mm	FR-254

[illegible][illegible]



 **@EMSUrology**

WWW.EMS-TRILOGY.COM