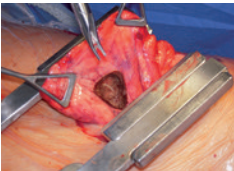
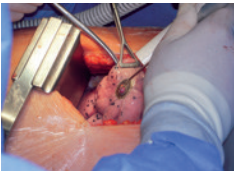
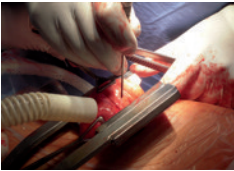


Applications

Examples for open surgery and laser assisted vats (video assisted thoracoscopic surgery)



- Metastasectomy
- Vaporization of tumors (carcinomas)
- Wedge excision of lung tissue
- Resection of multiple and deep lung metastases
- Recurring metastases and tumors
- Hemostasis and sealing of fistulas
- Adhesiolysis
- Tissue resection for histological examination

Pneumology

- Coagulation and ablation of endobronchial tumors and stenoses
- Remove of bronchial obstructions and fistulas
- Separation of tracheal stenoses
(all treatments are done with rigid or flexible endoscopes)

biolitec® laser systems

Advantages

- Multidisciplinary use for a variety of surgical applications
- Easy to set-up (no additional external cooling or high voltage requirements)
- Reliable diode technology
- Low maintenance cost
- User-friendly

LEONARDO® DUAL 45/100



Model	LEONARDO® DUAL 100	LEONARDO® DUAL 45	Ceralas® HPD
REF	SL980+1470nm100W	SL980+1470nm45W	SH1350nm60W400u
Wavelength	980 nm and 1470 nm	980 nm and 1470 nm	1350 nm
Power max.	max. 100 Watt (1470 nm / 15 Watt + 980 nm /85 Watt), separately adjustable	max. 45 Watt (1470 nm / 15 Watt + 980 nm /30 Watt), separately adjustable	60 Watt
Fiber diameter	≥ 360 µm	≥ 360 µm	≥ 400 µm
Laser class	4	4	4
Aiming beam	532nm und 635nm, green 1 mW, red 4 mW, user controlled intensity	532nm und 635nm, green 1 mW, red 4 mW, user controlled intensity	635 nm +/- 30 nm; PWM 4 mW (max.)
Treatment mode	CW, Pulse Mode, ELVeS® Signal, ELVeS® Segment, Derma Mode	CW, Pulse Mode, ELVeS® Signal, ELVeS® Segment, Derma Mode	CW, Pulse Mode
Pulse duration/ -break	0.01 - CW/ 0.01 - 60 sec	0.01 - 60 sec/ 0.01 - 60 sec	variable 0.01 – 99.9 sec or continuous
Power supply	110 - 240 VAC, 50/60 Hz, 600 VA	110 - 240 VAC, 50/60 Hz, 450 VA	100 – 240 VAC, 50/60 Hz, 400 VA
Cooling	-	-	Air cooled system
Dimensions (H × W × D)	approx. 27.50 cm × 37 cm × 8.5 cm	approx. 28 cm × 37 cm × 9 cm	approx. 30 cm × 60 cm × 30 cm
Weight	approx. 8.5 kg	approx. 8.5 kg	approx. 30 kg



biolitec® laser systems

CERALAS® HPD
combined with smoke
evacuation system



LEONARDO® DUAL 100 and Ceralas® HPD

REF	Product
SL980+1470nm100W	Laser Set LEONARDO® DUAL 100
SL980+1470nm45W	Laser Set LEONARDO® DUAL 45
SH1350nm60W400u	Laser Set Ceralas® HPD 1350nm 60W

All laser sets incl. 3 safety goggles, foot switch, interlock connector, power cord and manual in a carrying case. 1350 nm for Thoracic Surgery / Pneumology / General Surgery

Fibers

Bare Fibers Flat Tip

REF	Product	Length [m]	Core ø [µm] / [Fr]	OD ø [µm] / [Fr]
501200745	Bare Fiber 600 µm, Flat Tip, Adj. Luer, ID (1 × 6 h)	3	565 / 1.7	860 / 2.6
503200745	Bare Fiber 600 µm, Flat Tip, Adj. Luer, IC (1 × 6 h)	3	565 / 1.7	860 / 2.6
501300415	Bare Fiber 1000 µm, Flat Tip, Adj. Luer, ID (1 × 6 h)	2.6	945 / 2.9	1400 / 4
503300415	Bare Fiber 1000 µm, Flat Tip, Adj. Luer, IC (1 × 6 h)	2.6	945 / 2.9	1400 / 4

Gas Liquid Cooled Fibers

501200525	GLC 180 Gas-, Liquid Cooled fiber, ID (1 × 6 h)	3	565 / 1.7	1800 / 5.4
503200525	GLC 180 Gas-, Liquid Cooled fiber, IC (1 × 6 h)	3	565 / 1.7	1800 / 5.4

Special Fibers

501200990	Jumper for LFHP, ID (1 × 6 h)	3	565 / 1.7	1800 / 5.4
503200990	Jumper for LFHP, IC (1 × 6 h)	3	565 / 1.7	1800 / 5.4

Handpieces and instruments

501200985	Laser Focus Handpiece
500400370	Instrument for Thoracoscopy, with smoke suction adapter, for 600 – 1000 µm fibers
400100100	Universal Dual Luer Handpiece, for 600 – 1000 µm fibers

Accessories

AB2570	Mobile Table for HPD Laser
LA5199	Laser safety goggles 950 – 110 L4 + 1470 L2 (FULL), type: ear piece
LA1371	Laser safety goggles DIR 804 – 1755 L3 (FULL), type: basket, clear
LA5165	Sticker Laser warning 20 × 20 cm
400100115	Medi Strip 0.7/1.2 BF 600 µm, autoclavable – Fiber stripper for BF 600 µm
400100120	Medi Strip 1.0/1.5 BF 1000 µm, autoclavable – Fiber stripper for BF 1000 µm
400100130	Ceramic Fiber Cleaver, autoclavable
AB1908	Touhy Borst Adapter
AB2519	Luer Lock Adapter Female – Female Adapter for GLC fibers
AB2594	Biopsy needle 14 G, 6 cm with cm markings, sterile

Smoke evacuation

MP0016	ATMOSAFE mobile smoke evacuation inclusive autoclavable hose system
MP0017	ATMOS Main filter (ULPA)
MP0018	ATMOS Prefilter (HEPA)
MP0019	ATMOS Air hose, ø 22 mm, L = 2.10 m, single use
MP0020	ATMOS Air hose, ø 22 mm, L = 2.10 m, reusable
MP0021	ATMOS Hose connector straight ø 22 mm to ø 10 mm