

# Highlights 2019

Thorax





## Bronchoscopy Instruments for Children

### A practical set classification for the clinical routine

KARL STORZ offers instruments for pediatric bronchoscopy that are customized to the anatomy of children. This includes bronchoscopes in various sizes and lengths as well as optical forceps and accessories. To optimally structure our comprehensive product range for the benefit of our customers, we offer a total of three sets for foreign body removal in children. They are organized by age and corresponding tracheal diameter. Each set includes the appropriate bronchoscope sizes with a compatible telescope, optical forceps, and accessories. The instrument sets therefore offer everything needed for foreign body removal.

Sets:

- Set 1: Age group 0-6 months
- Set 2: Age group 6 months – 6 years
- Set 3: Age group 6-14 years

## Set 2: Age Group 6 Months – 6 Years

### HOPKINS® Telescope and Bronchoscopes

- 10324 AA **HOPKINS® Straight Forward Telescope 0°**, diameter 2.9 mm, length 36 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 10339 DD DOESEL-HUZLY **Bronchoscope**, size 3.5, length 26 cm
- 10339 CC DOESEL-HUZLY **Bronchoscope**, size 4, length 26 cm
- 10339 CD DOESEL-HUZLY **Bronchoscope**, size 3.5, length 30 cm
- 10339 C DOESEL-HUZLY **Bronchoscope**, size 4, length 30 cm
- 10339 BB DOESEL-HUZLY **Bronchoscope**, size 4.5, length 30 cm

### Optical Forceps and Instrumentation

- 10378 HF **Optical Forceps**, with alligator jaws, for the controlled grasping of hard foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS® Telescope 10324 AA
- 10378 CF **Optical Forceps**, 2 x 2 teeth, for the controlled grasping of coins and flat foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS® Telescope 10324 AA
- 10378 KF **Optical Forceps**, with KILLIAN bean jaws, for the controlled grasping of peanuts and soft foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS® Telescope 10324 AA
- 10381 B **Suction Tube**, with rubber tip, straight, diameter 2 mm, working length 35 cm

### Accessories

- 10101 FA **Prismatic Light Deflector, autoclavable**, with connection to fiber optic light cable (not to be used with 8574 K/KB/KT/KW)
- 10924 D **Adaptor**, for respirator
- 10318 K **Injection Cannula**, for positive pressure assisted ventilation system, LUER-Lock, outer diameter 3.5 mm, for use with bronchoscope series 10318 and 10339
- 10338 S **Instrument Guide for Suction Catheters**, short, for bronchoscopes for children and infants
- 10338 N **Rubber Telescope Guide**, for use with telescopes and optical forceps

### Wire Trays

- 39502 ZL **Wire Tray for Cleaning, Sterilization and Storage of instruments**, long, stackable, including hole plate walls and foldaway handles, external dimensions: 535 x 250 x 66 mm
- 39100 SL **Silicone Grid Insert LARGE DIAMOND GRID**, blue, extra wide meshed, for storage of instruments in wire trays, external dimensions: 530 x 240 mm
- 39100 PS **Fixation Pin**, including screw and washer, to screw instruments into position in wire trays, height 38 mm, package of 12, for use with Silicone Tie-Downs 39360 AS
- 39360 AS **Silicone Tie-Downs**, package of 12, for use with Fixation Pins 39100 PS and 39360 AP

**Sets 1 and 3 are set out in detail in ENDOWORLD® “Bronchoscopy Instruments for Children” (Order No.: 96082014E).**



## Optical Forceps for Rigid Bronchoscopy

The KARL STORZ product range offers a large selection of rigid bronchoscopes with matching instruments. This includes optical forceps. Six model series in various lengths and sizes cover a wide variety of applications. With our new, patented sheath design and the modified handle with force limitation, KARL STORZ now offers an even more attractive product.

Special Features:

- Simplified cleaning due to new, patented design
- Improved tactile feedback when grasping soft foreign bodies
- Force limitation to protect from jaw fracture

**Detailed information on the new optical forceps design is available in our Product Highlight “Optical Forceps for Rigid Bronchoscopy” (Order No.: 96084022E).**

## Selection of Optical Forceps for Rigid Bronchoscopy in Adults

For use with HOPKINS® telescopes diameter 5.5 mm, length 50 cm (10320 AA/BA)  
with 0° and 30° directions of view

- 10350 HF **Optical Forceps**, with alligator jaws, for the controlled grasping of hard foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS® Telescopes 10320 AA/BA
- 10350 KF **Optical Forceps**, for the controlled grasping of peanuts and soft foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS® Telescopes 10320 AA/BA
- 10350 L **Optical Forceps**, spoon-shaped, round, for biopsy, incl. cleaning adaptor, for use with HOPKINS® Telescopes 10320 AA/BA
- 10350 U **Optical Forceps**, universal, for biopsy and foreign body removal, incl. cleaning adaptor, for use with HOPKINS® Telescopes 10320 AA/BA
- 10350 ST **Optical Forceps**, for the repositioning and removal of DUMON silicone stents or polymer, metal and hybrid stents, incl. cleaning adaptor, for use with HOPKINS® Telescopes 10320 AA/BA



## Fluorescence Imaging in Thoracic Surgery

### OPAL1® technology for NIR/ICG with the IMAGE1 S™ camera platform

For imaging with the fluorescent dye indocyanine green (ICG)\*, KARL STORZ offers brilliant FULL HD imaging of the vascular and lymphatic systems for thoracic surgery. The NIR/ICG system offers additional visualization options, especially for anatomical segment resection.

- 5 and 10 mm telescopes with 0° and 30° directions of view available
- Xenon-based technology (no laser safety measures necessary)
- Switching between the white light and ICG modes possible at any time
- Optimal illumination and contrast enhancement
- Multidisciplinary applications, e.g., thoracic surgery, general and visceral surgery, gynecology, urology as well as reconstructive surgery

Additional information on the topic of segmentectomy with ICG is available in the doctor-to-doctor manual “NIR/ICG Fluorescence Imaging in Thoracoscopic Segmentectomy” (Order No.: 96085007).

\* Please verify that the fluorescent dye indocyanine green is approved for the respective indication in your country.

# OPAL1® Technology for NIR/ICG based on the IMAGE1 S™ camera system

Camera System



**IMAGE1 S CONNECT®**  
TC 200

Camera Control Unit



**IMAGE1 S™ H3-LINK**  
TC 300

Light Source



**D-LIGHT P: 20 1337 01-1**  
Spare Lamp: 20 133028  
Lamp Module: 20 1337 25

Camera Head



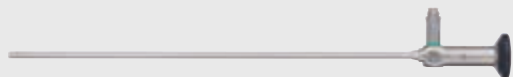
**H3-Z FI**  
TH 102

Light Cables



**Fiber Optic Light Cables**  
495 NAC/NCSC/TIP/NCS/VIT

Telescopes



**HOPKINS® Telescopes**  
26003 ACA/BCA  
26046 ACA/BCA

Open Surgery



**VITOM® II ICG**  
20 9160 25 AGA  
Accessories:  
28272 UGN/CN  
28272 HC  
28172 HR/HM



## Instruments for Video-assisted Thoracic Surgery

KARL STORZ offers instruments for Video-assisted Thoracic Surgery (VATS) that meet the requirements of both hygiene and economic efficiency. All VATS instruments can be disassembled into two or three parts and can therefore be individually combined with various handles. The instruments and jaws have been specifically adapted to the anatomy of the thorax, offering the operating surgeons the best prerequisites for VATS procedures.

The portfolio has been expanded to include reusable trocars with flexible cannulas as well as the proven KARL STORZ HOPKINS® telescopes.

### Product Overview:

- HOPKINS® telescopes with various lengths and diameters
- Flexible and rigid trocars in 6 and 11 mm
- CLICKLINE instruments with or without connector pins for unipolar coagulation
- ROBI® forceps and scissors for bipolar coagulation



## Sample Instrumentation for Video-assisted Thoracic Surgery

- 26046 BA **HOPKINS® Forward-Oblique Telescope 30°**, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 40120 NAL **Trocar**, with blunt tip, flexible cannula, **autoclavable**, size 6 mm
- 40123 NAL **Trocar**, with blunt tip, flexible cannula, **autoclavable**, size 11 mm
- 43237 LSR **CLICKLINE Parenchymal Forceps**, atraumatic, dismantling, without connector pin for unipolar coagulation, single action jaws, double curved jaws, size 5 mm, length 28 cm
- 43237 LLF **CLICKLINE Lung Forceps**, atraumatic, dismantling, without connector pin for unipolar coagulation, single action jaws, curved jaws, fenestrated, size 5 mm, length 28 cm
- 43249 LUP **CLICKLINE Scissors**, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, distally angled outer sheath, double action jaws, curved scissor blades, scissor blades open horizontally to angulation, size 5 mm, length 28 cm
- 43249 DUP **CLICKLINE Biopsy Forceps**, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, distally angled outer sheath, single action jaws, jaws open vertically to angulation, size 5 mm, length 28 cm
- 48451 LKP **ROBI® KELLY Dissecting Forceps**, CLERMONT-FERRAND model, dismantling, with connector pin for bipolar coagulation, distally angled outer sheath, double action jaws, curved, jaws open horizontally to angulation, size 5 mm, length 20 cm
- 48551 MT **ROBI® Scissors**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, distally angled outer sheath, straight scissor blades, scissor blades open vertically to angulation, size 5 mm, length 28 cm

**NEW**

## **EndoCAMEleon**® Telescope with Variable Direction of View

The ENDOCAMELEON® HOPKINS® telescope with rod lens system and a rigid 10 mm sheath offers a variable direction of view. This allows optimal adjustment of the viewing direction to any OR situation.

Special Features:

- Variable direction of view 0° – 90°
- Enhanced illumination
- Easy-to-use adjustment knob for selecting the direction of view, now with fin
- Combines the convenient handling of the proven HOPKINS® telescope with the advantages and potential of a telescope offering various directions of view
- Particularly suitable for use in anatomically narrow working spaces

## EndoCAMEleon® and Accessories

- 26003 EC **ENDOCAMELEON® HOPKINS® Telescope**, diameter 10 mm, length 31 cm, **autoclavable**, variable direction of view 0° - 90°, with adjusting knob for selecting the direction of view, fiber optic light transmission incorporated, color code: gold
- 495 NCSC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
- 39501 BEC **Wire Tray for Cleaning, Sterilization and Storage** of one ENDOCAMELEON®, length 32 cm, and one light cable, including holder for light post adaptor, silicone telescope holder and lid, external dimensions (w x d x h): 480 x 125 x 54 mm

### Recommended for use in uniportal VATS interventions

- 495 NVC **Fiber Optic Light Cable**, with 90° deflection to the instrument, very narrow radius of curvature, diameter 4.8 mm, length 300 cm

**NEW**

## IMAGE1 S™ 4U – mORe than a camera

The IMAGE1 S™ 4U camera system allows the operating surgeon to make optimal use of the benefits offered by 4K technology. A notable feature is the image quality: High image brightness, impressive colors, greater richness of detail and a significantly improved depth effect characterize this system. Thanks to the system's modularity, 4U components can be easily integrated into the existing IMAGE1 S™ camera platform. Consequently, the system is still compatible with existing technologies (e.g., rigid, flexible, fluorescence and 3D endoscopy) and can be adapted to meet individual customer needs.

- IMAGE1 S™ 4U impresses with outstanding, razor-sharp images
  - Excellent image brightness
  - First-rate color rendition
  - Greater richness of detail
- Three innovative visualization technologies for tissue differentiation:
  - CLARA: Homogeneous illumination
  - CHROMA: Contrast enhancement
  - SPECTRA\*: Spectral color shift and switch
- Easy integration into the IMAGE1 S™ camera platform

\* not for sale in the U.S.

- TC 201EN\* **IMAGE1 S CONNECT® II**, connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
- TC 304 **IMAGE1 S™ 4U-LINK**, link module, for use with IMAGE1 S™ 4U camera heads, power supply 100-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TH 120 **IMAGE1 S™ 4U One-Chip 4K UHD Camera Head**, S-Technologies available, progressive scan, soakable, EO sterilization, H<sub>2</sub>O<sub>2</sub> (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK
- TM 440 **58" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 400 x 400 and VESA 400 x 200 adaptors
- TM 350 **32" 4K 3D Monitor**, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, 5V DC output (1 A), wall mount with VESA 100 adaptor
- TM 342\*\* **31" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 and VESA 200 adaptors
- TL 300 **Cold Light Fountain POWER LED 300 SCB**, with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet, power supply 100-240 VAC, 50/60 Hz
- 495 NAC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm
- 495 NCSC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
- 495 TIP **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 300 cm

\* Also available in the following languages: DE, ES, FR, IT, PT, RU

\*\* TM 342 not available in USA, Japan & China

## Imaging and OR Integration



Storage and administration of image and video data



SCENARA® .store

Flexible support for image sources



Centralized communication interface



SCENARA® .connect

OR1 88 1.0.01/2019/A-E

# KARL STORZ OR1™

Future-oriented integration meets innovative data management



KARL STORZ SE & Co. KG, Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany  
[www.karlstorz.com](http://www.karlstorz.com)

Further information and an overview  
of Thorax products from KARL STORZ  
can be viewed on



[www.karlstorz.com](http://www.karlstorz.com)  
in the Human Medicine section,  
Thorax

**It is recommended to check the suitability of the product for the intended procedure prior to use.**



**STORZ**  
KARL STORZ—ENDOSKOPE

THE DIAMOND STANDARD



KARL STORZ SE & Co. KG  
Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany  
Postbox 230, 78503 Tuttlingen/Germany  
Phone: +49 (0)7461 708-0  
Fax: +49 (0)7461 708-105  
E-Mail: [info@karlstorz.com](mailto:info@karlstorz.com)  
[www.karlstorz.com](http://www.karlstorz.com)