Highlights 2019
Arthroscopy and Sports Medicine

Small Joints
Diamond Standard: HOPKINS® Telescopes and Sheaths for Optimal Vision

KARL STORZ HOPKINS® telescopes are considered to be the best arthroscopes in the industry. The diverse product range covers all arthroscopic interventions while the unique rod lens system ensures excellent image quality with optimal brightness, contrast and detail properties.

The product range includes all well-established angles of view in arthroscopy:

- 0°
- 30°
- 70°

Arthroscopes with diameters ranging from 1 mm to 4 mm leave nothing to be desired. A selection of sheaths with various locking mechanisms, which are co-ordinated with HOPKINS® telescopes, ensures the safe locking of the telescope in the sheath.
Recommended Sets, consisting of HOPKINS® Telescopes, Arthroscope Sheaths and Obturators

Set for the Knee Joint:
28731 BWA  HOPKINS® Wide Angle Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red
28135 CR  High-Flow Arthroscope Sheath, with snap-in coupling mechanism, diameter 5.5 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28126 BC/BT/BS, 28134 O, color code: blue
28126 BT  Obturator, semisharp, for use with Arthroscope Sheaths 28229 DR, 28129 CR, 28126 CR/R/B, 28136 CR, 28135 CR and 28136 EC, color code: green-red-yellow

Set for the Shoulder Joint:
28731 BWA  HOPKINS® Wide Angle Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red
28136 CR  High-Flow Arthroscope Sheath, with snap-in coupling mechanism, diameter 6 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28126 BC/ BT/BS, 28134 O, color code: red
28126 BT  Obturator, semisharp, for use with Arthroscope Sheaths 28229 DR, 28129 CR, 28126 CR/R/B, 28136 CR, 28135 CR and 28136 EC, color code: green-red-yellow

Set for the Hip Joint:
28731 CWA  HOPKINS® Wide Angle Lateral Telescope 70°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: yellow
28130 CR  High-Flow Arthroscope Sheath, with snap-in coupling mechanism, diameter 6 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28130 BC/BT, 28140 O, color code: red
28130 BT  Obturator, semisharp, for use with Arthroscope Sheaths 28131 CR/R, 28130 CR/R, color code: green-red-yellow

Set for the Ankle and Elbow Joints:
28208 BA  HOPKINS® Forward-Oblique Telescope 30°, diameter 2.7 mm, length 11 cm, autoclavable, fiber optic light transmission incorporated, color code: red
28133 DS  High-Flow Arthroscope Sheath, with snap-in coupling mechanism, diameter 4 mm, working length 7.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescope 30° and Obturator 28133 BC
28133 BC  Obturator, blunt, for use with Arthroscope Sheaths 28133 CR/DS

Set for the Wrist Joint:
28300 BA  HOPKINS® Wide Angle Forward-Oblique Telescope 30°, diameter 2.4 mm, length 10 cm, autoclavable, fiber optic light transmission incorporated, color code: red
28303 DS  High-Flow Arthroscope Sheath, with snap-in coupling mechanism, diameter 3.5 mm, working length 6.5 cm, two stopcocks, rotatable, for use with HOPKINS® Telescope 30° 28300 BA and Obturators 28302 BU/BV
28302 BV  Obturator, blunt, for use with Arthroscope Sheaths 28303 DS/BS

Further HOPKINS® telescopes and sheaths can be found in the Arthroscopy and Sports Medicine catalog.
VITOM® 3D – 3D Visualization for Microsurgery and Open Surgery

The VITOM® 3D system provides many surgical disciplines with a revolutionary solution for the visualization of microsurgical and open surgical interventions. Application possibilities are similar to that of the operating microscope. The most important functions are controlled via the IMAGE1 PILOT, which is mounted on the OR table in the direct vicinity of the surgeon.

- Smaller, lighter and more compact than an operating microscope
- Lower acquisition costs and creates synergistic effects with endoscopy by using the same video tower – thus combining the benefits of endoscopy and microscopy
- Ergonomic work – the user is not confined to the eyepiece
- Improved workflow – the OR team can view the procedure in the same image quality as the surgeon
Overview

VITOM® 3D
with integrated illuminator

Holding Arm, for VITOM® 3D

Sterile Cover for VITOM® 3D

Fiber Optic Light Cables

IMAGE1 PILOT

IMAGE1 PILOT Sterile Cover

IMAGE1 S™ Camera System

Cold Light Fountain POWER LED 300 SCB

Holding Arm, for IMAGE1 PILOT

3D Monitors

3D Polarization Glasses,
3D Clip-on Glasses

* mtp
VITOM® 3D – Potential Applications

The VITOM® 3D was specifically developed for the classic applications of surgical microscopes (neurosurgery, ENT, spine surgery, hand surgery, and plastic surgery). Furthermore, it can be used in classic open surgery.

NEUROSURGERY, e.g. tumor biopsy, tumor resection, nerve decompression, intracranial bleeding, vascular surgery

ORAL AND MAXILLOFACIAL SURGERY, e.g. dysgnathia surgery, flap plasty, orbital surgery

ENT, e.g. tumor resection, tympanoplasty, laryngeal surgery, adenotmy, blepharoplasty, septoplasty, open rhinoplasty, thyroplasty, thyroidectomy, eardrum paracentesis, tympanostomy tubes, cochlear implants

CARDIAC SURGERY, e.g. mitral valve surgery, pediatric cardiac surgery
Potential applications range from the visualization of the surgical field to documentation and training. The VITOM® 3D is supported by the IMAGE1 S™ camera platform and therefore offers all functions and advantages such as the S-Technologies CLARA, CHROMA, and SPECTRA* in 2D and 3D.

**GYNECOLOGY**, e.g. colposcopy, conization

**HAND SURGERY** and **PLASTIC SURGERY**, e.g. reconstructive surgery, median nerve neurolysis, Dupuytren’s contracture, ulnar shortening osteotomy, ulnar head prosthesis, arthroplasty, ganglion resection, correction of trigger finger and mallet finger, four-corner arthrodesis

**SPINE SURGERY**, e.g. herniated disks, spinal stenoses, spondylodeses, vertebral fracture

**PEDIATRICS**, e.g. hypospadias, anorectal malformation, atrial septal defect

*not for sale in the U.S.*
VITOM® 3D – 3D visualization for microsurgery and open surgery

TH 200  VITOM® 3D, with zoom and focus function, integrated illumination and horizontal alignment, working distance 20-50 cm, fiber optic light transmission incorporated, suitable for wipe disinfection, for use with IMAGE1 S D3-LINK® TC 302 and IMAGE1 PILOT TC 014

TC 014  IMAGE1 PILOT, control unit with 3D wheel, 4 programmable function keys and USB port, for intuitive control of camera systems and connected units, for use with IMAGE1 S™ and VITOM® 3D TH 200

IMAGE1 PILOT is required for the use of VITOM® 3D. VITOM® 3D and IMAGE1 PILOT are always used with a holding system. Please note that special clamping jaws are required to mount VITOM® 3D to the holding system.

Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>2-chip, 4K</td>
</tr>
<tr>
<td>Zoom</td>
<td>infinitely variable</td>
</tr>
<tr>
<td>Working distance (WD)</td>
<td>20-50 cm</td>
</tr>
<tr>
<td>Magnification (WD 30 cm with 32&quot; 3D monitor)</td>
<td>approx. 8-30 x</td>
</tr>
<tr>
<td>Cleaning</td>
<td>wipe disinfection</td>
</tr>
</tbody>
</table>
VERSACRANE™ holding system for the convenient positioning of VITOM®

VERSACRANE™ Holding Arm, high, mobile, spring-supported, with quick release coupling KSLOCK, for use with KARL STORZ clamping jaws.

including:

Mobile Stand, with height adjustment

WARNING: The VERSACRANE™ holding arm cannot be used with rigid endoscopes!
Accessories

28272 VTK  **VITOM® 3D Clamping Jaw**, with ball joint and quick release coupling KSLOCK (male), for use with VITOM® 3D and KARL STORZ holding systems with quick release coupling KSLOCK

28272 VTP  **VITOM® 3D Clamping Jaw**, for POINT SETTER, with dovetail connector, for use with VITOM® 3D and POINT SETTER holding system

495 VIT  **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 550 cm

  *Note: The 550 cm long Light Cable 495 VIT is a necessary requirement for the VERSACRANE™.*

TH 001*  **Cover**, for VITOM® 3D, sterile, for single use, package of 10

*Please note: The instruments displayed are not included in the wire tray.*
VITOM® 3D Illuminator, additional lighting for VITOM® 3D, with 1 adjustable lens, autoclavable, for use with VITOM® 3D and light cable

Protective Cover, for VITOM® 3D

Wire tray for reprocessing the VITOM® 3D illuminator

Set 2B

39502 ZH  Wire Tray, stackable, with hole place walls
39502 LH  Lid
39100 SH  Silicone Grid Insert LARGE DIAMOND GRID
39100 PS  Fixation Pin, package of 12
39360 AS  Silicone Tie-downs, package of 12
TC 014  **IMAGE1 PILOT**, control unit with 3D wheel, 4 programmable function keys and USB port, for intuitive control of camera systems and connected units, for use with IMAGE1 S™ and VITOM® 3D TH 200

28172 HR  **Rotation Socket**, to clamp to the operating table, with one mounted Butterfly Nut 28172 HRS, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand

28272 HB  **Articulated Stand**, reinforced version

04 1150-20*  **Cover**, elasticated, 42 x 164 cm, sterile, for single use, package of 20, for use with KARL STORZ holding systems and IMAGE1 PILOT
Monitor

**TM 350** 32" 4K/3D Monitor, color systems PAL/NTSC, screen resolution 3840 x 2160, image format 16:9

**TM 330** 32" 3D Monitor, color systems PAL/NTSC, screen resolution 1920 x 1080, image format 16:9

**9826 SF** Monitor Stand, basic monitor stand, tiltable, rotation +/-30°, disinfectable, color white, with VESA 100 adaptor, for use with all monitors with VESA 100 adaptors up to 12 kg

**9832 SFH** Monitor Stand, for professional use, height-adjustable, tiltable, rotation +/-30°, disinfectable, color white, with VESA 200 adaptor, for use with 32" monitors up to 15 kg

**TM 003** 3D Polarization Glasses, fogless, passive, for use with 3D monitors

**9800 C** 3D Clip-on Glasses, circularly polarized
Performance Meets Ergonomics: The New DrillCut-X® ARTHRO Shaver Handpiece

The new DRILLCUT-X® ARTHRO shaver handpiece stands out due to its excellent cleanability and exceptional versatility. It features an ergonomic design while its dimensions make the tool suitable for use in both large and small joints. The shaver handpiece is controlled via the UNIDRIVE® S III ARTHRO console.

- Ergonomic design allows various hand positions
- Possible to lock blades in 4 positions (0°, 90°, 180°, 270°)
- Low-noise operation
- Handpiece weight of only 310 g allows fatigue-free work

**Unique feature:**

The distal end of the shaver handpiece is detachable so that optimal cleaning of previously hard-to-access areas is possible.
The DRILLCUT-X® ARTHRO shaver handpiece and versatile shaver blades is a combination that is optimal for successful arthroscopy. Various reusable blades as well as blades for single use offer a wide range of high-quality working materials.

**Shaver Handpiece:**

28200 DX **DRILLCUT-X® ARTHRO Shaver Handpiece,** up to 8000 rpm, for use with UNIDRIVE® S III ARTHRO SCB 28723020-1, as of software status 1.10.

**Shaver Blades:**

Working length 120 mm

<table>
<thead>
<tr>
<th>Type</th>
<th>Use</th>
<th>Order No.</th>
<th>Diameter</th>
<th>Color Code</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive Cutter</td>
<td>reusable</td>
<td>28205 AB</td>
<td>3.5 mm</td>
<td>green</td>
<td>soft tissue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28205 AC</td>
<td>4.2 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28205 AD</td>
<td>5.5 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for single use</td>
<td></td>
<td>28205 ABS</td>
<td>3.5 mm</td>
<td>light gray</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28205 ACS</td>
<td>4.2 mm</td>
<td>medium gray</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28205 ADS</td>
<td>5.5 mm</td>
<td>purple</td>
<td></td>
</tr>
<tr>
<td>Aggressive Cutter</td>
<td>reusable</td>
<td>28205 AK</td>
<td>4.5 mm</td>
<td>green</td>
<td>soft tissue</td>
</tr>
<tr>
<td></td>
<td>for single use</td>
<td>28205 AKS</td>
<td>4.5 mm</td>
<td>purple</td>
<td></td>
</tr>
<tr>
<td>End Cutter</td>
<td>reusable</td>
<td>28205 BC</td>
<td>4.2 mm</td>
<td>red</td>
<td>soft tissue</td>
</tr>
<tr>
<td></td>
<td>for single use</td>
<td>28205 BCS</td>
<td>4.2 mm</td>
<td>medium gray</td>
<td></td>
</tr>
<tr>
<td>Full Radius Resector</td>
<td>reusable</td>
<td>28205 CC</td>
<td>4.2 mm</td>
<td>yellow</td>
<td>soft tissue</td>
</tr>
<tr>
<td></td>
<td>for single use</td>
<td>28205 CBS</td>
<td>3.5 mm</td>
<td>light gray</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28205 CCS</td>
<td>4.2 mm</td>
<td>medium gray</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28205 CDS</td>
<td>5.5 mm</td>
<td>dark gray</td>
<td></td>
</tr>
<tr>
<td>Round Burr</td>
<td>reusable</td>
<td>28205 FC</td>
<td>4.2 mm</td>
<td>orange</td>
<td>bone</td>
</tr>
<tr>
<td></td>
<td>for single use</td>
<td>28205 FCS</td>
<td>4.2 mm</td>
<td>medium gray</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28205 FDS</td>
<td>5.5 mm</td>
<td>dark gray</td>
<td></td>
</tr>
</tbody>
</table>

Further reusable blades as well as blades for single use can be found in the Arthroscopy and Sports Medicine catalog.
Precise and Efficient Work in Hand Surgery: Basic Instruments for Wrist Arthroscopy

The arthroscopy and accessory sets from KARL STORZ are optimized to the demands of wrist arthroscopy.

- Brilliant visualization with KARL STORZ HOPKINS® arthroscopes, even in tight joint spaces
- Successful work on structures thanks to the extremely flat jaws of the SILCUT® PRO line
- The arthroscopy set is supplemented by an accessory set with standard instruments that are essential for precise wrist arthroscopy
Wrist Arthroscopy Set consisting of:

- **28300 BA** HOPKINS® Wide Angle Forward-Oblique Telescope 30°, diameter 2.4 mm, length 10 cm, autoclavable, fiber optic light transmission incorporated, color code: red
- **28303 DS** High-Flow Arthroscope Sheath, with snap-in coupling mechanism, diameter 3.5 mm, working length 6.5 cm, two stopcocks, rotatable, for use with HOPKINS® Telescope 30° 28300 BA and Obturators 28302 BU/BV
- **28302 BV** Obturator, blunt, for use with Arthroscope Sheaths 28303 DS/BS
- **28305 BA** HOPKINS® Forward-Oblique Telescope 30°, diameter 1.9 mm, length 6.5 cm, autoclavable, fiber optic light transmission incorporated, color code: red
- **28306 BN** High-Flow Arthroscope Sheath, with standard coupling mechanism, diameter 2.5 mm, working length 4 cm, one stopcock, fixed, for use with HOPKINS® Telescope 30° 28305 BA and Obturators 28306 BS/BT, color code: red
- **28306 BT** Obturator, blunt, for use with Arthroscope Sheath 28306 BN/S
- **28145 SN** Probe, graduated, length of hook 2 mm, diameter 1 mm, working length 4 cm
- **28302 S** Probe, graduated, length of hook 1 mm, diameter 1 mm, working length 7.5 cm
- **28572 NJ** SILGRASP® PRO Thread Grasping Forceps, straight jaws, sheath diameter 2.8 mm, straight, handle with cleaning connector, working length 8.5 cm
- **28572 AD** SILCUT® PRO Punch, through-cutting, cutting width 2 mm, straight jaws, sheath diameter 2.5 mm, straight, handle with cleaning connector, working length 8.5 cm
- **28572 O** SILCUT® PRO Oval Biter, through-cutting, cross-toothed, straight jaws, sheath diameter 2.5 mm, straight, handle with cleaning connector, working length 8.5 cm
- **28572 ADL** SILCUT® PRO Punch, through-cutting, cutting width 2 mm, jaws curved to left 45°, sheath diameter 2.5 mm, straight, handle with cleaning connector, working length 8.5 cm
- **28572 ADR** SILCUT® PRO Punch, through-cutting, cutting width 2 mm, jaws curved to right 45°, sheath diameter 2.5 mm, straight, handle with cleaning connector, working length 8.5 cm
- **221150** HARTMANN Ear Forceps, extra delicate, serrated, 1 x 4.5 mm, working length 12.5 cm
- **517000** MASING Needle Holder, jaws smooth on the inside, working length 8 cm
- **215010** Retractor, 2 x 3 prongs, blunt, length 10 cm

**Note:** All products can be ordered separately.

Shaver blades and burrs for wrist arthroscopy can be found in the Arthroscopy and Sports Medicine catalog.
Imaging and OR Integration

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
Further information and an overview of Arthroscopy and Sports Medicine products from KARL STORZ can be viewed on www.karlstorz.com in the Human Medicine section, Arthroscopy and Sports Medicine.