Rigid Endoscopy in Cattle
SEEH/HOSPES Theloresectoscopy Set

Developed with the Clinic for Obstetrics and Andrology of Large and Small Animals, with Veterinary Ambulatory, Justus-Liebig-University Giessen, 1st Professor's Chair: Prof. Dr. Dr. h.c. H. Bostedt

KARL STORZ has developed the first theloresectoscope (teat endoscope with integrated electrosurgical working element) for minimally invasive teat surgery and diagnostics in the standing cow.

The new instrument set makes it possible to enter the teat via the streak canal or with a lateral single puncture approach.

With either approach, visual examination can be performed as well as the resection of tissue that occludes the streak canal. An assistant is not required to perform the procedure. The clinician can position the instruments in such a way that the entire operating field is in view throughout the procedure, making it simple even for the novice endoscopist.

The removal of obstructive tissue via theloresectoscopy has been shown to reduce post-operative complications and costs compared to thelotomy removal.
SEEH/HOSPES Theloresectoscopy Set

64017 AA  **HOPKINS® Straight Forward Telescope 0°**, autoclavable, diameter 1.9/2.1 mm, length 18 cm, fiber optic light transmission incorporated, color code: green

68045 EA  **SEEH/HOSPES Theloresectoscope**
including:
- 1x Working Element
- 2x Coagulation Electrode
- 1x High Frequency Cord
- 1x Protection Tube

68047 E  **Sheath**, with Luer-Lock connector for insufflation, diameter 11 Fr.

68048 EH  **Trocar**, including:
- Cannula
- Obturator, blunt
- Obturator, conical

**Unipolar High Frequency Cord for use with Working Element 68045 E:**

277  **Unipolar High Frequency Cord**, with 4 mm plug for models KARL STORZ and Erbe type T, older models, length 300 cm

277 A  **Unipolar High Frequency Cord**, with 4 mm plug for models Berchtold and Martin, length 300 cm

277 KE  **Unipolar High Frequency Cord**, with 5 mm plug for AUTOCON® II 400 SCB (111, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ AUTOCON® (series 50, 200, 350) and Erbe type ICC, length 300 cm

277 KB  **Unipolar High Frequency Cord**, with 8 mm plug for models KARL STORZ AUTOCON® II 400 SCB system (112, 116) and Valleylab, length 300 cm
Laparoscopic Abomasopexy

An increasing number of reported left abomasal displacements (LDAs) in high production dairy cows suggests the potential for significant economic advantage to new technologies that treat the condition most effectively. Laparoscopic-assisted toggle pin placement offers the opportunity to treat the cow faster and with reduced morbidity compared to conventional open surgical procedures. The laparoscopic procedure also minimizes the risk of inadequate toggle placement. It combines the advantages of laparotomy (control of reposition and fixation) and the roll and suture treatment (quick, minimally invasive).

With the cow in a standing position, the laparoscope is inserted into the left paralumbar fossa and the abomasum is identified. Then under laparoscopic guidance, the cannula for toggle placement is inserted into the abomasum and the toggle is inserted through the trocar. The procedure can be finished in dorsal recumbency with caudolateral trocar placement, or the instrument for toggle placement (68160 LS) can be used for completing this procedure in standing position. The laparoscope is then placed caudolateral to the xyphoid. Through a second portal caudal to the first one, a grasping forceps is inserted to grasp the sutures and exteriorize them. After 3 – 4 weeks, the sutures can be cut.

The KARL STORZ abomasopexy set combines an excellent optical system with high quality instruments and toggle. The toggle is extra strong with very smooth suture holes, so that the risk of abomasal rupture at the suture site is minimized.
Set for Laparoscopic Repositioning of Abomasal Displacement

**HOPKINS® Enlarged view**

Multiple puncture approach
Trocar size 11 mm

- **26003 AA/BA**
  - HOPKINS® Straight Forward Telescope 0°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

- **26003 BA**
  - HOPKINS® Forward-Oblique Telescope 30°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

- **62103 MP**
  - Trocar, size 11 mm, color code: green, including:
    - Trocar only, with pyramidal tip
    - Cannula, without valve, with insufflation stop cock, working length 10.5 cm
    - Multifunctional Valve, size 11 mm

- **30123 NKL**
  - Trocar, size 11 mm, color code: green, including:
    - Trocar only, with pyramidal tip
    - Cannula, flexible, with thread, with silicone leaflet valve, length 8.5 cm
Instruments for Toggle Placement

- **68160 X** Cannula, for toggle placement, diameter 5 mm, length 37 cm
- **68160 XS** Obturator, sharp, for Cannula 68160 X
- **68160 XT** Obturator, blunt, for Cannula 68160 X, for use as toggle pusher

**Toggle**, for abomasal fixation, package of 6 pieces

Instrument for performing the complete procedure in a standing cow

- **68160 LS** Instrument for Toggle Placement, complete, including:
  - Outer Sheath, distal part
  - Outer Sheath, proximal part
  - Inner Sheath, distal part
  - Inner Sheath, proximal part

Instruments for performing procedure by ventral approach

- **60421 MD** CLICKLINE Dissecting and Grasping Forceps, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, size 5 mm, length 43 cm, including:
  - Plastic Handle, without ratchet
  - Outer Tube, insulated
  - Forceps Insert

- **62120 JLL** Pneumoperitoneum Needle, with spring-loaded blunt stylet, LUER-lock, length 15 cm
Transvaginal Embryo Transfer

Since bovine embryo transfer has become a routine procedure, there is a need for easy access to the bovine ovaries. The transvaginal approach to the abdomen is one which allows free access to the bovine oviduct, facilitating the routine transfer of early tubal-stage embryos. The outer tube is placed with the blunt obturator caudodorsal to the cervix, then the blunt obturator is replaced by the sharp obturator and introduced through the vaginal wall into the peritoneal cavity.

Next, the specially designed telescope with the inner sheath is placed through the outer tube, and the camera is connected. Now you have free access to the oviduct and can manipulate the ovaries per rectum.

The bovine embryo transfer set is uniquely designed in cooperation with the Institute for Agrarbiotechnology in Tulln, Austria (IFA-Tulln) to the ideal specifications for this procedure, facilitating rapid and effective implementation of ET.