

## Instruments for Endoscopic Spine Surgery

## **INDICATIONS**

The Set of Instruments for Endoscopic Spine Surgery is composed of a complete set of permanent materials for performing endoscopic spine surgical procedures. It has core preservation methods and significant pain reduction due to reduced disc space height. This procedure is indicated for cases of disc protrusion or extrusion with compression of nerve roots in any region of the disc (central, posterolateral, foraminal, extraforaminal, and migratory). The different instrument sizes enable independent access to the patient's adipose panicle.

Full video endoscopic surgery has changed spine surgery, as it has been shown to be a less traumatic method with minimal morbidity and similar clinical results compared to conventional techniques. The surgeon uses fluoroscopy as a guide to position the cannula in the appropriate place where an endoscope with a working channel will pass through. This way there will be minimal damage to the local tissues, especially the muscles. Using special instruments for this technique, the surgeon removes parts of the injured disc, as well as herniated fragments, decompressing the nerve and relieving

pressure on the nerve and within the disc. All

the instruments are cautiously

removed and the muscles return to their place.

Many patients experience immediate relief of symptoms soon after the procedure.





Straight Dilator III 5.2 C / Straight Dilator IV 6.26 C / Conical Dilator I 2.8 C / Conical Dilator II 4.0 C: sequential cylindrical and hollow instruments with a straight tip, which are inserted one by one over the Nitinol Guide Wire for the dilation of the orifice in the anterior annulus in endoscopic lumbar spine surgery.

Multiple Square Beater: cannulated and numbered instruments, used with Conical and Straight Dilators to facilitate the use of the cannulated hammer.

**2-Hole Dilator - Short / 2-Hole Dilator - Long:** instrument used to facilitate the displacement of neural structures out of the working field, it is inserted over the Nitinol Guide Wire, and replaces the use of Conical and Straight Dilators.

**Probe Dissector / Ball Tip Probe / Short Column Probe:** instrument used to identify and move structures within the joint or dissect fragments.



Short Nozzle Access Glove C / Short Straight Access Glove C / Oblique Access Glove C / 30° Access Glove C / L70° Access Glove C: cannula-type instruments for the different needs of the surgeries or techniques used. The glove can be inserted over the Short 1-Hole Dilator, Long 1-Hole Dilator or Straight or Conical Dilator IV 6.26 Dilator. Used in conjunction with the Instrument Adapter.

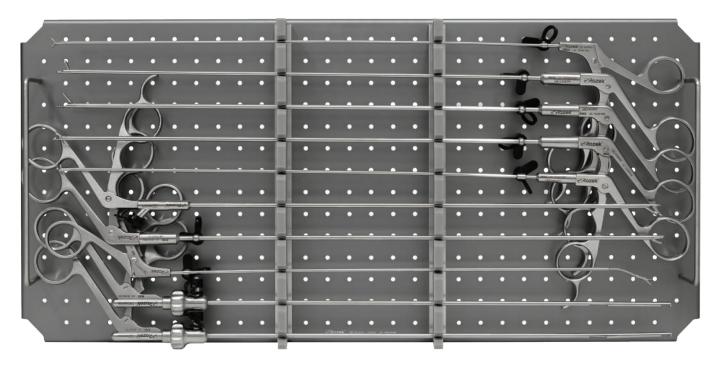
**5-mm Drill Bit / 6.5-mm Drill Bit:** Instrument used in conjunction with the Trephine Cable for manual bone removal.

**Cannulated Hammer:** Cannulated instrument used in conjunction with the beaters.

**Angled Endoscope 208 mm / 30° / 7.2 mm:** Special for its angulation, it provides illumination in depth and is positioned directly over the working area, and the endoscope itself has a working channel, as well as an outflow and inflow channel for the irrigation fluid.

**Sharp Straight Dissector / Sharp Round Dissector:** Instrument used under direct visualization to remove osteophytes or calcified parts of the disc.

**Trephine Cable:** Instrumental used in conjunction with Trephines to move them.



Love, 2,5 mm bite width (R063): Type K Handle.



Love, Upwards Cutting, 3,0 mm bite width (R064): Type  ${\sf K}$  Handle.



**Grasper, straight tip, 3,5 mm bite width, 350 mm (R065):** Type K Handle.



**Love, Upwards Cutting, 2,5 mm bite width, 350 mm (R066):** Type K Handle.



Mini Love, Upwards Cutting, 2,0 mm bite width, 350 mm (R067): Type K Handle.



**Love, Upwards Cutting, 3,4 mm bite width, 350 mm (R068):** Type K Handle.



Scissors Punch, Upwards Cutting, 3,5 mm bite width (R080): Type W Handle.



**Grasper with flexible tip, 3,0 mm bite width (R081):** Type W Handle.



Kerrison 40°, 3,5 mm bite width (R082): Type Q Handle.



Kerrison 90°, 3,5 mm bite width (R083): Type Q Handle.



## **ADVANTAGES**

- Local anesthesia, with patient responses
- Outpatient procedure, with minimal hospitalization time
- Little damage to blood vessels and less bleeding
- Low possibility of infections, because it is performed under continuous irrigation
- Minimal incision
- Causes minimal injury to structures not involved in the procedure
- Less possibility of postoperative fibrosis
- Indicated for patients with comorbidities who cannot be submitted to general anesthesia
- Quick recovery

Merely illustrative images





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+55 16 2107 2345



+55 16 2107 2346

