



DSEK Instrument Catalogue

DSEK

Instruments to assist Descemet's Stripping Endothelial Keratoplasty

9-781 (8.0mm) or 9-788 (9.0mm)

DK Single Ended Ring Marker



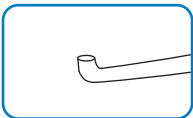
- 8.0mm (ref: 9-781) or 9.0mm (ref: 9-788) diameter low profile ring
- Measured outside line, outer diameter
- Round handle, length 122mm



other ring sizes are available, including double ended handle options. Contact D&K for request

6-250-1

DK Sinskey Hook (reverse)

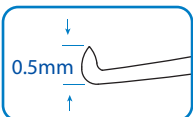


- 0.18mm diameter tip pointing up
- Angled shaft, tip to angle length 10.0mm
- Round handle, length 118mm



6-258

Descemet's Spatula



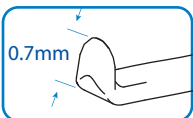
- Sharp pointed tip
- Curved shaft length 14.0mm
- Round handle, length 117.5mm



The descemet's spatula is used to score a circular pattern into the descemet's membrane without leaving the anterior chamber. Using a ring marker (9-781 Ø8.0mm or 9-788 Ø9.0mm) a circular template can be marked on the surface of the cornea

6-257

Daya Descemet's Scraper



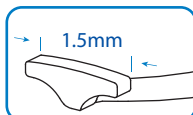
- Sharp edges around tip
- Tip width 0.5mm, height 0.7mm
- 45° angled shaft, tip to angle length 14mm
- Round handle, length 124mm



The Daya Descemet's Scraper has a sharp paddle tip that is angled up from the shaft to scrape the Descemet's membrane under the cornea. The long 14mm shaft allows the tip to go all the way across the cornea easily.

6-259

Descemet's Scraper



- 'T' shape tip
- Tip width 1.5mm, height 0.6mm
- Curved shaft length 14mm
- Round handle, length 118mm

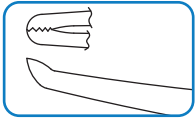


Descemet's Scraper has a T shape tip that scrapes the Descemet's membrane under the cornea. The long curved shaft allows the tip to all areas of the cornea

2-2-787

Galindez DSEK Forceps

Used for peeling off the Descemet membrane & removing failed buttons



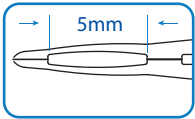
- Serrated interlocking tips
- Tip to pivot point 10.0mm
- 1.5mm width at pivot box
- Tips angled 45° to handle
- Flat handle, length 118mm



The Galindez DSEK forceps have been designed to assist in DSEK procedures. The forceps is used to peel off the Descemet membrane once it has been scored with the reverse sinskey hook. The forceps can also be used in removing DSEK buttons that have failed. The procedure is similar to, and becomes as easy as, performing a capsulorhexis.

2-2-788

Daya Donor Disc Forceps



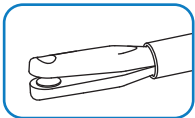
- Two 1.75mm textured grasping platforms
- 5.0mm gap between platforms
- 40° angled tips, tip to angle length 13mm
- Round handle, length 115mm



The forceps are used to grasp the folded donor disc. The two textured platforms hold the tissue at the edge and the space between prevents the tissue from being crushed protecting the endothelium.

2-896

Small Incision Manipulating Forceps



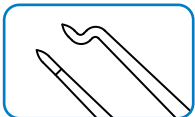
- Small raised disc on inner face of jaw with matting hole
- Used for delicate grasping of donor tissue
- 20 gauge, 33.0mm long shaft



- Squeeze action handle activates both jaws
- Round squeeze handle, length 143mm

6-261

Daya Donor Graft Insertion Hook



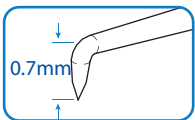
- Fine pointed tip, tip length 0.5mm
- 45° angled shaft length 10.0mm
- Round handle, length 119mm



The Daya Donor Graft Insertion Hook is used to push the donor disk through the paracentesis. The hook automatically disengages from the graft on withdrawal from the eye and can also be used to position the graft centrally.

6-254

Daya DSEK Manipulator Hook



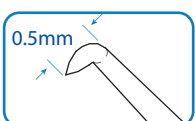
- Sharp pointed tip,
- Tip length 0.7mm, diameter 0.2mm
- Straight shafts
- Round handle, length 121mm



The Daya DSEK Manipulator Hooks are used as a pair to push and pull the donor disk through the paracentesis. The straight shaft allows for a universal tip orientation, as there is sometimes a need to use the tip in the reverse position (tip pointing upwards).

6-255

Daya DSEK Angled Manipulator Hook



- Sharp pointed tip
- Tip length 0.5mm, diameter 0.2mm

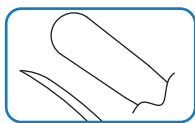


- 45° angled shaft, tip to angle length 5.0mm
- Round handle, length 120mm

The following dissector are used for Deep Anterior Lamellar Keratoplasty (DALK) and donor preparation for Descemet's Scraping Endothelial Keratoplasty (DSEK).

6-607

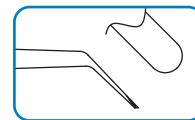
Morlet Lamellar Knife / Dissector



- 0.35mm thick by 2.0mm wide curved shaft
- 12.0mm tip to curve length

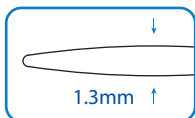


- 0.1mm thick by 1.5mm wide with sharp edges
- 3.0mm tip to angle length
- Round handle, length 110.0mm



6-604

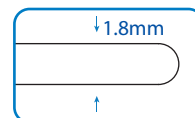
Daya Lamellar Spear



- 1.3mm to 0.25mm width curved spear blade
- Sharp edges at the very tip for creating pocket



- 35° angled curved shaft, tip to angle length 10.5mm
- Round handle, length 124mm

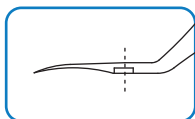


The following lamellar separator forceps can be used in DALK or donor preparation for DSEK

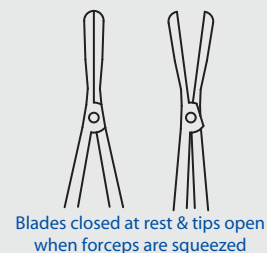
With the blades of the forceps closed the instrument acts as a dissecting spatula, the blades then separate, enabling blunt dissection within the corneal stroma. This enables rapid dissection of the cornea.

2-280

Daya Lamellar Separator Forceps (Reverse action style handle)

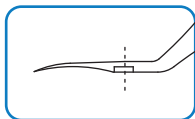


- Tip end to pivot box length 11mm
- 45° angled shafts
- Reverse action style handle, length 97.5mm

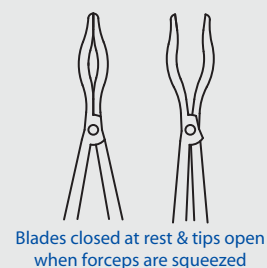
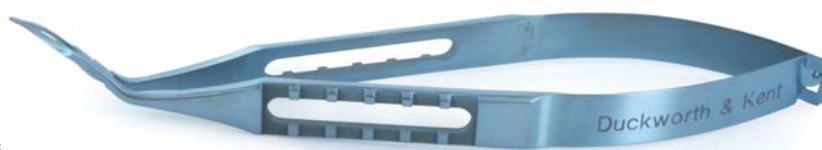


2-281

Nakano Lamellar Separator Forceps



- Sharp outer edges to blades
- Tip end to pivot box length 12mm
- 40° angled shafts
- Reverse action style handle, length 97.5mm



9-588

Buratto Adjustable Speculum

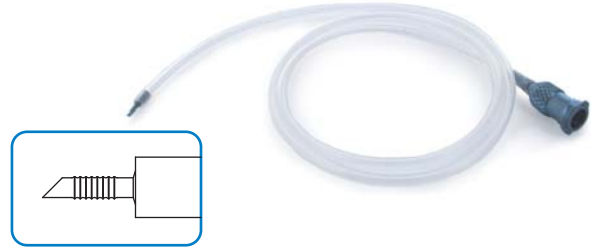


- 15.5mm open blades
- Angled to rest temporally
- Adjustable with thumb screw

Lightweight, compact and strong yet allows for maximum exposure

8-616

O'Gawa Infusion Cannula



- 20 gauge, thin wall, 0.9mm diameter x 4.0mm length
 - Straight shaft, 45° bevelled tip
 - Grooves in cannula body ensure non-traumatic securing of cannula
 - Silicone tubing and luer fitting supplied
- Chamber maintainer is inserted into anterior chamber for continuous infusion during the stripping and removal of Descemet's membrane

DSEK by Sheraz Daya

Duckworth and Kent have in collaboration with Sheraz Daya, developed a series of instruments for both Anterior and Lamellar Surgery. With the assistance of Sheraz Daya a short video demonstrates his procedure and is available to watch and download on the D&K website at www.duckworth-and-kent.com/videos The following passage written goes through the DSEK procedure using his instruments

DONOR PREPARATION:

The Daya Lamellar Separator Forceps are available in either reverse action (ref: 2-280) or scissors action style (ref: 2-280-1) and used for lamellar dissection. For DSEK donor preparation, a micrometer knife set at 350 to 400 microns (depending on corneal thickness) is used to make a 4mm limbal incision on the donor. The sharp end of the Daya Lamellar Spear (ref: 6-604) is used to dissect a deep pocket to allow entry of the Lamellar Forceps. The tissue is then dissected by the separating or spreading action of the forceps and usually very easy to accomplish in a preserved corneal donor. The forceps in their closed state can be used in the same fashion as a conventional lamellar dissecting spatula. The lamellar dissecting end of the Daya Lamellar Spear can be used in conjunction with the Separators to accomplish complete dissection. Once the donor is dissected, it is removed from the block taking care not to damage the endothelial surface. The donor is then punched using a conventional Donor Punch.

RECIPIENT PREPARATION:

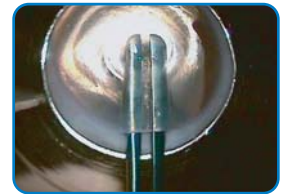
Once the donor disc has been created, the recipient eye can be prepared. 3 to 4 paracenteses are performed at the limbus. Aqueous is exchanged for Trypan Blue and allowed to remain in the anterior chamber for 30 to 60 seconds. This is then removed and exchanged for Balance Salt Solution. An AC chamber maintainer is inserted through one of the paracentesis incisions and fluid entry controlled using the foot pedal. A donor trephine (9.0mm if possible) is marked using Gentian Violet and used to mark the epithelial surface of the cornea. A 2.75mm limbal incision is made and the Daya Descemet's Scraper (ref: 6-257) is used to score and scrape Descemet's membrane, commencing diagonally opposite the incision and using the trephine mark as a guide. Descemet's membrane is gradually peeled off and removed from the eye. The limbal wound is then enlarged to 5mm.

IMPLANTATION OF POSTERIOR LAMELLAR DONOR DISC:

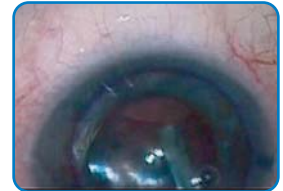
A minimal amount of Healon® is placed on the endothelial surface and the posterior lamellar tissue is then over-folded and grasped using the Daya Donor Disc Forceps (ref: 2-2-788) which are used to introduce the donor into the prepared recipient (see right). Air is injected under the donor allowing the donor to unfold and become opposed to the posterior stroma of the recipient cornea. The Daya DSEK manipulators (ref: 6-254 & 6-255) are used through the paracentesis incisions to position the graft centrally. The manipulators have a sharp point enabling the surgeon to grasp the anterior or stromal portion of the Donor Disc. Air is left in the anterior chamber and the pupil is dilated to prevent pupil block. The patient is then checked one hour after surgery to ensure the donor disc is in position and that the intraocular pressure is not abnormally high.



Daya Lamellar Spear (6-604) used to dissect a pocket.



Daya Lamellar Separator Forceps (2-280-1) used to complete dissection.



Daya Descemet's Scraper (6-257) used to score and scrape Descemet's membrane.



Daya Donor Disc Forceps (2-2-788) used to introduce the donor.

■■■■■■■■ DSEK / DSAEK* - Descemet's Stripping (Automated*) Endothelial Keratoplasty

■■■■■■■■ DALK - Deep Anterior Lamellar Keratoplasty

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Revised 12.11.12

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