Product Guide

Micro Incisional Cataract (MICS)

Duckworth & Kent
reusable titanium surgical instrument manufacturer

Incision less than 1.8mm
Duckworth & Kent is a world leader in reusable titanium ophthalmic surgical instruments.

Proud to be a British manufacturing company, Duckworth & Kent are at the forefront of advancing ophthalmic surgery from their state of the art headquarters in England.

The company’s ongoing commitment to exceptional engineering over 60 years is proven by its innovative product ranges.

About Duckworth & Kent

For centuries traditional handheld surgical instruments were made from stainless steel.

In the 1960’s the aerospace industry embraced the benefits of titanium alloy. In the 1970’s a metallurgist advised Duckworth & Kent to consider titanium alloy (Ti 6Al-4V).

Titanium is well suited to precision surgical instrumentation:

- Reusable
- No oxidation
- Non-magnetic
- Lightweight
- Durability
- Anodising – reduces glare from microscopes

Duckworth & Kent moved away from stainless steel. Applying new manufacturing techniques, they became specialists in titanium, producing the finest medical devices.
Duckworth & Kent’s product range covers a wide variety of instruments including:

- Cataract
- Glaucoma
- Vitreoretinal
- Refractive
- General
- Corneal

Every instrument is designed, in-house to exacting standards using high grade titanium alloy.

Visit: [www.duckworth-and-kent.com](http://www.duckworth-and-kent.com) to view a wide range of ophthalmic titanium instruments.

As well as product information, you will also find detailed literature and informative videos showing some of our instruments in action.

View our full range of Micro Incisional Cataract instruments overleaf.
Micro incision cataract surgery (MICS) is a variation of cataract surgery through incision less than 1.8mm with the intentional aim being a reduction in surgical invasiveness, while also improving the overall surgical outcomes. The main advantages of MICS include the control and avoidance of surgically induced corneal astigmatism and the decrease of postoperative corneal aberrations.

### Specula

**9-588-3**  
**Lieberman Adjustable Speculum**

- 15mm open blades
- Angled to rest temporally
- Adjustable with thumb screw

### Forceps

**2-100E**  
**Pierse Notched Forceps**

- Pierse 0.25mm notched, 6mm tying platforms
- Straight shafts
- Flat handle, length 90mm
- Design registration number 004383396-0001

**2-132E**  
**Colibri Toothed Forceps (0.12mm)**

- 0.12mm, 1 x 2 teeth, 6mm tying platforms
- Colibri style shafts, tip length 2mm
- Flat handle, length 90mm
- Design registration number 004383396-0001

### Diamond Knives

**4-402**  
**DK Angled Retractable Diamond Knife, 1.8mm Spear**

- Width 1.8mm
- Length 4mm
- Thickness 0.2mm
- 1.8mm wide spear diamond blade
- 45° angled retractable handle, length 137mm

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<tr>
<th>Product No.</th>
<th>Product Name</th>
<th>Variation</th>
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<tbody>
<tr>
<td>4-406</td>
<td>DK Angled Retractable Diamond Knife, 2.2mm Spear</td>
<td>Spear tip, width 2.2mm</td>
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</tbody>
</table>
Capsulorhexis Forceps

**2-847-4**
DK Squeeze handle Capsulorhexis Forceps

- Fine pointed serrated tips with platforms
- 0.9mm tip opening
- Curved 23 gauge tube

- Squeeze action activates both jaws
- Round squeeze handle, length 122mm

**2-716GMR8E**
Inamura Round Handle Capsulorhexis Forceps

- Sharp pointed serrated tips
- Cross action tips, 1.2mm width at pivot box
- Curved shaft, tip to pivot point 8.5mm

- Marks on shaft 2.5mm and 5mm denote desired size of capsulorhexis
- Tips angled 45° from shaft
- Round handle, overall length 110mm
- Design registration number 004383396-0001

Designed to fit comfortably through any incision down to 1.5mm. Precise interlocking serrated tips with a sharp point enable the surgeon to initiate the capsule tear then securely grasp the capsule to perform the capsulorhexis. Designed specifically for corneal placed incisions, tip to pivot length reduced to 8.5mm. Keeping the pivot in the incision reduces the leakage from the anterior chamber, it also enables the tips to operate fully at the smaller incision sizes without stretching the incision and causing corneal deformation.

**2-716GER8**
Inamura Round Handle Capsulorhexis Forceps

- Sharp pointed serrated tips
- Cross action tips, 1.5mm width at pivot box
- Curved shaft, tip to pivot point 9.5mm

- Marks on shaft 2.5mm and 5mm denote desired size of capsulorhexis
- Tips angled 45° from shaft
- Round handle, length 110mm
- Design registration number 004383396-0001

Nucleus Dividers

**6-085**
Barrett Duo Nucleus Rotator / Manipulator / Splitter

- Straight, sharp inner/outer sides of tip, length 1.25mm
- Cutting edges 60° to axis
- 45° angled shaft, tip to angle length 14mm

- 60° Cut
- 0.65mm mushroom tip
- 45° angled shaft, tip to angle length 10mm
- Barrett balanced set handle, length 124mm
The procedure allows the surgeon to mechanically divide the nucleus through a 1.8mm incision prior to placing the phaco tip into the eye. This easy technique eliminates grooving or sculpting with the phaco tip, thereby removing the risk of rupturing the posterior capsule during this procedure.

The current design of prechoppers have a combo tip that features a sharp angled edge on one side of the blade and a rounded blunt edge on the other side. The angled blade is usually used for the initial insertion and for rotating the bisected nuclear fragments. The rounded blade is used not only for prechopping very soft nuclei, but also for ascertaining the complete nuclear split close to the posterior capsule. If resistance is felt the Akahoshi Nucleus Sustainer (6-095) can be used as a second instrument to stabilise the nucleus and provide counter-traction, common in cases of harder nuclei.

**2-817E**  
Salvitti Akahoshi Micro Prechopper (Small Tip)

- Tips fully open to 2.5mm
- Flattened tips in vertical plane, tip height 1.3mm
- 1.8mm maximum width at incision point
- Straight shafts, reverse cross action style
- Round handle, length 119mm
- Design registration number 004383396-0001

**2-818E**  
Inamura-Talon Prechopper Forceps

- Tips fully open to 2.5mm
- Flattened tips in vertical plane, tip height 1.6mm
- 1.8mm maximum width at incision point
- Straight shafts, reverse cross action style
- Round handle, length 119mm
- Design registration number 004383396-0001

**2-820E**  
Paddle Prechopper Forceps Angled 45°

- Tips fully open to 2.5mm
- Arrow tip shape for penetrating nucleus
- Flattened paddle area of tips for nucleus splitting, tip height 1mm
- 1.8mm maximum width at incision point
- 45° angled reverse cross action shaft, tip to angle length 13.5mm
- Round handle, length 115mm
- Design registration number 004383396-0001

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<th>Tip Type</th>
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<tr>
<td>2-820-1E</td>
<td>Paddle Prechopper Forceps</td>
<td>E-Range handle, 119mm</td>
<td>Straight shaft</td>
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</table>
Sterilising Tray (10 instruments)

- External dimensions: 264mm x 162mm x 25mm
- Suitable for 10 instruments
- One silicone mat

Inamura Hydrodissection Cannula

- 22 gauge tube (0.7mm diameter)
- Twin jets, inclusive angle 60°
- 45° angled tip
- Overall length 36mm

The cannula was initially designed for hydrodissection and nucleus rotation. With traditional single port cannula, single injection is not enough to complete the hydrodissection. However, with the Inamura Multipurpose Cannula the double port of fluid swiftly separates the cataract from the lens capsule, and in most cases the nucleus can be rotated after a single injection. Fluid is injected directly underneath the anterior capsule. The smooth rounded cannula end enables the rotation of the nucleus and reduces any risk of damage to the capsule bag.

Inamura-Nezu Hydrodissection Cannula

- 18 gauge tube, (1.25mm diameter)
- Twin jets, inclusive angle 30°
- With outer sleeve
- Overall length 38mm

This cannula allows for a quick and more controlled hydrodissection, with a twin jet and outer sleeve which allows any returning fluid to be channelled through the outer sleeve and free flow out through any of the four rear ports. This reduces the chance of iris prolapse and lens subluxation in shallow chamber and small pupil eyes.

8-652
DK Irrigation Handpiece

- 23 gauge, 0.65mm tube diameter
- Two 0.4mm side irrigation ports
- Curved shaft, tube length 15mm
- Round handle, length 107mm

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<tr>
<td>8-652S</td>
<td>Short Handle Irrigation Handpiece</td>
<td>Short Handle, 80mm</td>
<td>23 gauge (no change)</td>
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8-657
DK Aspiration Handpiece

- 23 gauge, 0.65mm tube diameter, textured tip
- 0.3mm aspiration port
- Curved shaft, tube length 11mm
- Round handle, length 103mm

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<tr>
<td>8-657S</td>
<td>Short Handle Aspiration Handpiece</td>
<td>Short Handle, 77mm</td>
<td>23 gauge (no change)</td>
</tr>
</tbody>
</table>
We are here to help
Interested in our product ranges or have a general enquiry, please contact our dedicated Customer Service Team.

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