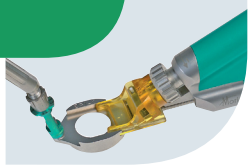
Moria Range of Products

LASIK Surgery

Epi-LASIK Surgery



Corneal Transplant

Evolution 3E

Moria

Leading Innovations in Ophthalmology

LASIK Surgery

Intelligently designed

- Safety and reliability of two independent motors:
  - one for head advancement,
  - one for blade oscillation.
- Simplicity of pre-set parameters: suction time, oscillation speed, advancement rate.
- Customization of flap thickness, diameter, and hinge
- Large Cut solutions for hyperopes, flat corneas, wavefront-guided ablations and lasers requiring large ablation zones characteristics.

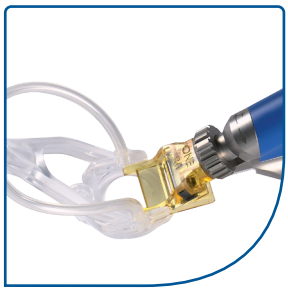
The Single-Use Solution

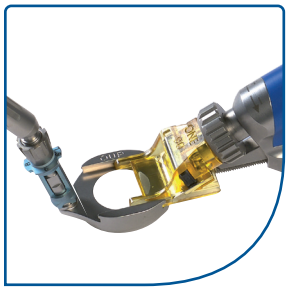
- Protected blade to avoid potential damage.
- Eliminates complications and risks probably linked to damaged or improperly reusable heads.
- Eliminates sterilization and maintenance.
- More rapid patient turnover, greater profitability.
- Lower initial investment costs.

The One Use-*Plus* System

One Use-*Plus* SBK offers accuracy, predictability and reproductibility equivalent to femto SBK, with faster recovery and at a fraction of the cost.

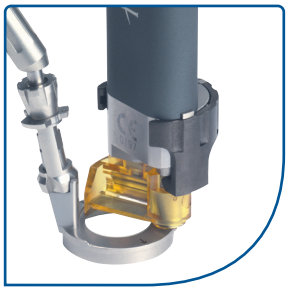
- Pre-assembled, linear, automated microkeratome.
- Intraoperative visibility.
- Nasal hinge.
- Several head sizes available for customized flap thicknesses from 100 µm(1) to 130 µm(2) on average.
- Several Single-Use suction rings to accommodate for all keratometries.





The M2 Single-Use System

- Pre-assembled, rotating, automated microkeratome.
- 360° hinge position.
- Several head sizes available for customized flap thicknesses including for Thin-Flap LASIK (110 µm(3) on average).
- Multiple suction rings allow intra-operative customization of flap characteristics.

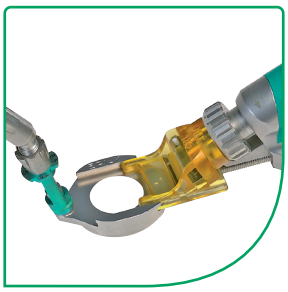


(1) Duffey RJ. Moria One Use-Plus SBK microkeratome: predictably thin, smooth, planar flaps for faster visual recovery. 26th ESCRS meeting; Sept 13rd 2008; Berlin, Germany
(2) Vryghem J. Single-Use microkeratomes in demand by European surgeons. *Cataract and Refractive Surgery Today Europe* 2007;8:68-70.
(3) Huhtala and al. Corneal flap thickness with the Moria M2 Single-Use head 90 microkeratome. *Acta Ophtalmol. Scand.* 2007;85:401-406.

Epi-LASIK Surgery

Epi-K™

The unique design and intelligent features of Moria Epi-K™ have made it the leader in the US epikeratome market[1].



- Epi-LASIK is a refractive procedure performed with an epikeratome which mechanically cleaves the epithelium from the Bowman's membrane, leaving a pristine optical zone for laser ablation. The epithelial flap can then either be discarded or repositioned, according to the surgeon's preference.
- Many surgeons have made Epi-LASIK their procedure of choice for surface ablation. With the Epi-K™ and the latest refinements in technique and postoperative care, Epi-LASIK produces faster healing and visual recovery than all other surface ablation procedures.

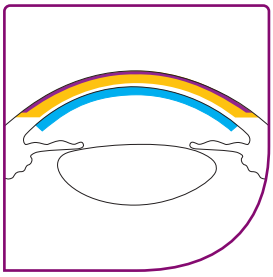
The optimal design for safe, reliable separation time after time

- Handpiece with two independent motors for fast separator oscillation and safe advancement rate.
- Metal separator with proprietary edge geometry specifically for cleaving rather than cutting.
- Disposable plastic head encases each separator for added safety and convenience.
- Unique large applanation plate provides yet an additional margin of safety.
- Several suction rings with adjustable stops to customize the epithelial flap diameter.
- Large diameter suction ring for hyperopes, flat corneas, wavefront guided ablations, and lasers requiring large ablation zones.
- Single-Use suction ring option.

(1) Duffey RJ, Leaming D. US Trends in Refractive Surgery - Epikeratome use. Refractive Subspecialty Day during annual meeting of AAO, October 2010; Chicago, IL, USA.

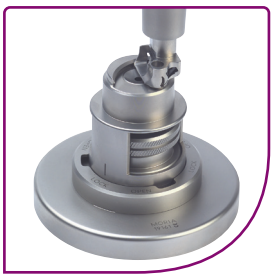
Corneal Transplant

Superficial Anterior Lamellar Keratoplasty (SALK)
Deep Anterior Lamellar Keratoplasty (DALK)
DSAEK and Ultra-thin DSAEK

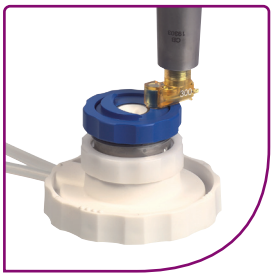


ALTK-CBm System

Unique, fully sterilizable equipment for Microkeratome-Assisted Lamellar Keratoplasties, including(1):

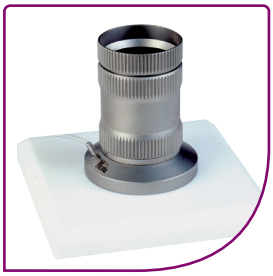


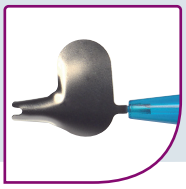
- **Descemets' Stripping Automated Endothelial Keratoplasty (DSAEK) and Ultra-thin DSAEK indicated in :**
  - Fuchs' and other endothelial dystrophies
  - Post-cataract surgery edema (aphatic or pseudophakic bullous keratopathy)
  - Some failed PKs.
- Superficial Anterior Lamellar Keratoplasty for the treatment of superficial corneal opacities resulting from previous refractive surgical procedures, infections, degenerations, dystrophies, superficial scars or trauma.
- Deep Anterior Lamellar Keratoplasty indicated when a thick stromal lamella needs to be removed: keratoconus, post-herpetic scars, post infectious opacities, some corneal dystrophies, and alkali or acid burn lesions.

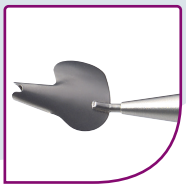


Moria offers a full range of sterilizable or disposable devices necessary to perform lamellar surgery:

- CB microkeratome with multiple heads and suction rings.
- Dedicated instruments, including the Busin's glide and forceps for DSAEK and Ultra-thin DSAEK.
- Hanna punch and ONE disposable punch.
- Hanna keratoplasty trephine and corresponding artificial chamber for penetrating keratoplasty.

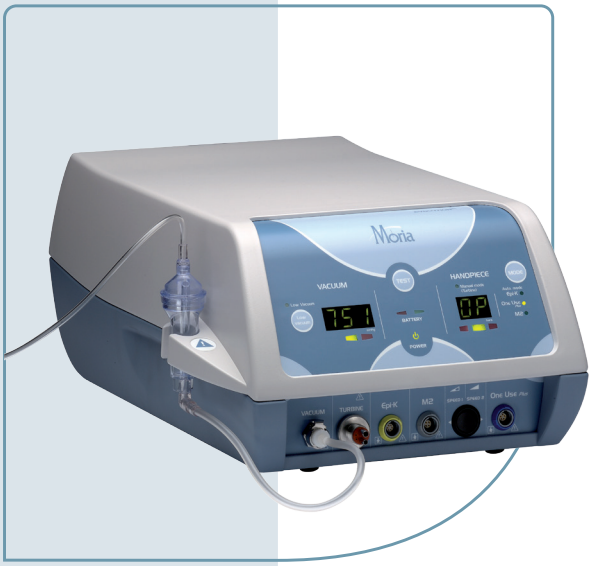






(1) Atlas of Microkeratome Assisted Lamellar Keratoplasty - Massimo Busin, Robert C. Arffa. Slack Incorporated 2006.

A Common Platform



Evolution3E Control Unit

Operates the One Use-*Plus*, M2 Single-Use, Epi-K™ and the ALTK-CBm System.

Moria's console offers a wealth of features to enhance performance, safety, flexibility, and ease-to-use:

- Two high performance pumps maintain safe vacuum.
- "Slow vacuum release" option provides gentle release to minimize potential retinal damage.
- Runs on wall current, with built-in back up battery for uninterrupted use.

Evolution3E Control Unit Technical Specifications:

Dimensions	430 x 240 x 190 mm
Weight	13.6 kg
Ambiant temperature	15°C to 35°C (59°F to 95°F)
Non-condensing humidity	45% to 75%
Voltage/cycles	115 V / 50-60 Hz 230 V / 50-60 Hz
External fuse	External fuse
Battery capacity and type (inside the control unit)	Battery capacity and type (inside the control unit)
Fuse (inside the control unit)	Fuse (inside the control unit)
Inlet : console supply	Inlet : console supply
Outlet: turbine supply	Outlet: turbine supply
Type of protection against electric shock	Type of protection against electric shock
Compliance	IEC 60601-1 CE 0120 Medical device of class IIa according to EC directive 93/42/EEC and 2007/47/EEC ISO 9001 – version 2008 ISO 13485 – version 2003 FDA registered

Product Specifications

Microkeratomes Technical Specifications:

Product name	Manual or Automatic	Advance rate	Applanation plate	Cutting mechanism	Oscillations per minute	Flap diameter (mm)	Eye fixation	Head size	Flap thickness	Variable flap orientation
One Use-*Plus*	Automatic	Adjustable	Yes	Blade in disposable pre-assembled head	15,000 rpm	Customizable	Set of rings according to different keratometries	90, 130, Large Cut 110 and Large Cut 130	Avg. 100, 130, 110 and 130 µm respectively	Nasal
M2 Single-Use	Automatic	Adjustable	Yes	Blade in disposable pre-assembled head	15,000 rpm	Customizable	Set of rings according to different keratometries	90 and 130	Avg. 110 and 150 µm respectively	360°
Epi-K™	Automatic	Adjustable	Yes	Blunt edge metal separator in dispo-sable pre-assembled head	Confidential	Customizable	Set of rings according to different keratometries	N/A	N/A	Nasal
CB for ALTK-DSAEK	Manual with an autoclavage turbine	Variable	Yes	Blade	15,000 rpm	Customizable	Set of rings according to different keratometries	110, 130, 150, 200, 250, 300, 350,400	Depending on advance speed	360°

Power source: AC with battery backup
Regulatory status: 510(k) approved and CE marked

Non contractual document. MORIA #66064-C-09.2011

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