







QUALITY

### STABILITY

SAFETY

**TECHNICAL BROCHURE** 



Genesis, is a **new hydrophobic intraocular lens** developed and manufactured by **CUTTING EDGE** to meet your expectations in terms of:

### QUALITY - SAFETY - STABILITY

Cutting Edge builds experienced and dedicated teams to design, prototype and manufacture **high-quality Intraocular Lenses**. Our state-of-the-art facility honours the quality and process sophistication of the medical device industry.

The proximity of our Research & Development team to our manufacturing operations is truly significant for building close links and in using a results-orientated approach. **Cutting Edge masters all manufacturing stages in house**, from machining to optical and mechanical tests, through to packaging and international logistics.

**Genesis®** was engineered by a team who fully believe that the human eye is both fragile and precious and requires the utmost in precision, "savoir-faire" and faultless industrial quality.

Constant Con

From 10 D to 30 D 0,5 D increment

CUTTING EDGE



### **Genesis®** is manufactured using a cryo-machining process.

This process ensures quality of the geometry of the edges and removal of the joint interfaces.





# QUALITY

### ACRYLIC HYDROPHOBIC COPOLYMER MATERIAL PEA / PEMA KNOWN ON THE MARKET

• An implant deployment time of 25 sec at 24 ° C

• A continuous 360° epithelial cell barrier (including at the junction of haptics and optic)



**MAGNIFICATION 60 X** 



MAGNIFICATION 120 X

Scanning electron microscopy images

### MTF (MODULATION TRANSFER FUNCTION)

Genesis exceeds ISO 11979-2 standard requirement for optical properties and test methods (0.43 at 100 cycle/mm) at all light conditions and pupil diameter.





### A COMPLETE INJECTION SYSTEM PRELOADED WITH PUSH AND SCREW

	INJECTION SYSTEM	In-the wound recommended incision (mm)	In-the-bag recommended incision (mm)
	Medicel Accujet Pro - Push	2.2	2.4 - 2.5
To generation	Medicel Accujet Pro - Screw	2.2	2.4 - 2.5

Source : Medicel

### GEOMETRIC HAPTIC DESIGN ALLOWS EASY FLEXION AND EVEN FORCE DISTRIBUTION

1 Punctual contact in the uncompressed state at 13 mm

2 Increased contact angles under compression at 10 mm (standard)





## LOADING GUIDE

- Peel open the blister and transfer the injection system onto the sterile field.
- 2 Carefully rinse the lens with balanced salt solution through the tip of the cartridge.

RINSE THE LENS



### **PREFOLD THE LENS**

- 3 Holding the injector body with one hand and the plunger with the thumb and forefinger of the other hand, slowly advance the plunger in prefold position.
- (41) Initial position.
- (42) Pre-fold position: the silicone cushion has to be positioned in the L shape spacing of the lens protection flap.
- 5 Close the wings of the loading chamber. When the « click-lock » mechanism is engaged, the lens is securely in place.





#### **CLOSE THE WINGS**



#### **FILL WITH VISCOELASTIC**

- 6 Apply a generous amount of viscoelastic through the tip of the cartridge, fully inserting the cannula into the tunnel and entirely filling including the tip.
- 7 Push and/or screw the plunger forward until the lens enters the storage area (tunnel of the cartridge). The system is ready for injection. The lens should be injected in the shortest possible time after preparing the device.
- 8 The lens is to be implanted with the anterior side of the lens facing up towards the anterior side of the eye. The orientation of the lens should look like an inverted S.







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# TECHNICAL SHEET



References	
Genesis preloaded - push	GOPP
Genesis preloaded - screw	GOPS

DESIGNATIONS	SPECIFICATIONS
Optical diameter	6 mm
Total diameter	13 mm
Shape	Monobloc C-loop with 360° square edge on the posterior surface including at the junction of haptics and optic
Optic	Aspheric
Angulation	0°
Material	Hydrophobic, clear
Diopter range	From 10D to 30D in 0.5D increments
Biometry	US = SRK-T : 118.2, pACD : 5.08, SF : 1.34, Haigis aO : 1.402, a1 : 0.4, a2 : 0.1 Optical biometry* = SRK-T: 118.975, pACD: 5.6334, SF: 1.8232, Haigis aO: 1.4582, a1: 0.4, a2 : 0.1
Refractive index	1,555 at 35° C
Sterilization	Ethylene oxide
Conditioning	Box of 1 unit with injector
Size of the incision	From 2.2 mm
Injector	Medicel Accujet Pro (Push or Screw)

\*Available on www.iolcon.org (Dec. 2018)



SENSE OF EXCELLENCE SENSE OF INNOVATION SENSE OF PARTNERSHIP SENSE OF ETHICS

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