// md tech

A journey of a thousand miles begins with a single step

Lao Tzu

// md tecl

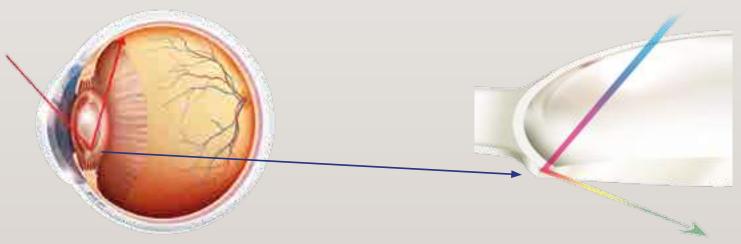
SPECIAL FEATURES

Spherical Aberration

The lens geometry has been developed to induce a specific negative spherical aberration value: -0.26µm which exactly compensates for corneal spherical aberration^(1, 2) by bringing the patient's eye to the condition of a young, emmetropic eye.^(3, 4, 5, 6)

- Atchison D.A., Markwell E.L. Aberration of emmetropic subjects at different ages. Vision Researche , 48,2224 -2231, 2008.
- 2. Atchison D.A., Markwell E.L., Kasturirangan S., Pope J.M., Smith G. & Swann P.G. Age related changes in optical and biometric characteristics of emmetropic eyes. Journal of Vision, 8 (4):29, 1-20, 2008.
- 3. Berrio E., Tabernero J., Artal P. Optical aberrations and alignment of the eye with age. Journal of vision, 10(14):34, 1-17, 2008.
- Athalde H.V., Campos M. Costa C. Study of ocular aberrations with age. Arg Bras Oftalmol. 2009Sep-Oct;72 (5);617-21.
 Amano S., Amano Y., Yamagami S., Miyai T., Miyata K., Sameljima T., Oshika T., Age-related changes in corneal and ocular higher order
- wavefront aberrations. Am J Ophtalmol. 2004 Jun;137 (6): 988-92.
- 6. Wang L., Dai E., Koch DD., Nathoo A. Optical aberrations of the human anterior cornea. J Cataract Refract Surg. 2003 Aug; 29(8): 1514-21.

Glare Stop Barrier

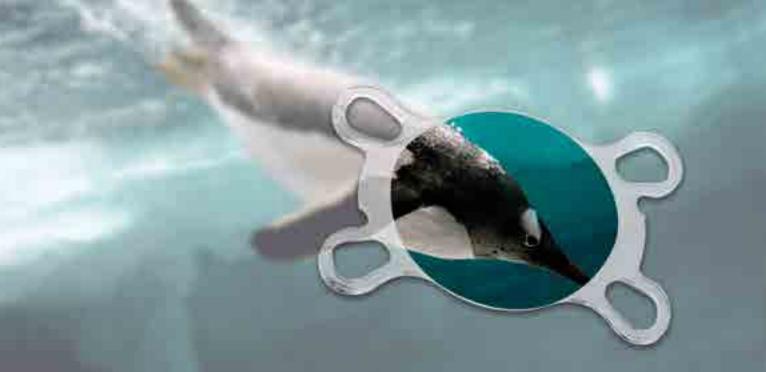


md tech IOLs have a Glare Stop Barrier Filter. This particular treatment of the edge of the IOL allows to avoid the formation of glares^(7, 8, 9) that deteriorate the quality of vision.

^{7.} Welch NR., Gregori N., Zabriskie N. et al. Satisfaction and dysphotopsia in the pseudophakic patient. Can J Ophtalmology. 2010 Apr; 45 (2): 140-3. 8. Jin Y., Zabriskie N., Olson RJ. Dysphotopsia outcomes analysis of two truncated acrylic 6.0mm intraocular optic lenses. Ophtalmologica, 2009;

^{223(1):47-51.} Epub 2008 Nov 6.

^{9.} Davison JA., Positive and negative dysphotopsia in patients with acrylic intraocular lense. J Cataract Refract Surg. 2000 Sep; 26(9): 1346-55.



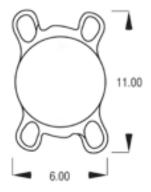
Hybrid IOLs

CE₀₅₄₆

i-stream hybrid Preloaded intraocular lens

- Purified hydrophilic and hydrophobic copolymer
- 25% water content

- Natural Yellow Filter
- Design made to guarantee stability in the capsular bag



Model	ISP60H				
Material	Hybrid copolymer				
Dimension and angulation	6.0 mm x 11.0 mm; 5°				
Lens geometry	Aspheric biconvex with 360° square edge				
Diopter range	From -5.0D to +40.0D				
A constant	118.2				
Optimized constant	SRK/T = 118,7; SRK/2 = 118,9; Holladay1 sf = 1,60; HofferQ pACD = 5,39; Haigis a0 = 1,25; a1 = 0,40; a2 = 0,10				
Injector and incision size	1.8 mm with push type from Medicel				

Instructions for use

Insert the loading chamber containing the lens in the special housing.

Put the viscoelastic first through the hole and then from the tip of the cartridge until complete filling of cartridge and chamber. Carefully remove the stopper of loading chamber gripping it with thumb and index. Close the loading chamber. Push the plunger gently.









Lens is also available in not preloaded version i-stream microflex

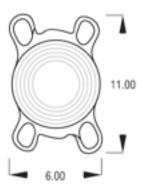


- 14 concentric rings with gradually decreasing heights
- Multifocal with apodized design for the best vision in every distance
- High contrast sensitivity and no glare
- Designed using proprietary algorithms and latest software
- Additional power +3.0D

Premium IOLs

i-stream diffrax



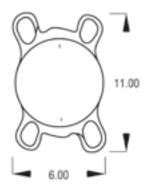


Model	ISP60D			
Material	Hybrid copolymer			
Dimension and angulation	6.0 mm x 11.0 mm; 5°			
Lens geometry	Aspheric biconvex with 360° square edge			
Diopter range	From +15.0 D to +28.0D			
A constant	118.2			
Optimized constant	SRK/T = 118,7; SRK/2 = 118,9; Holladay1 sf = 1,60; HofferQ pACD = 5,39; Haigis a0 = 1,25; a1 = 0,40; a2 = 0,10			

- Easy positioning
- Microincision injection in 1.8 mm for reducing surgical astigmatism
- Stability safe over time
- Cylinder values covering wide range of market requests

Premium IOLs





Model	ISP60QT				
Material	Hybrid copolymer				
Dimension and angulation	6.0 mm x 11.0 mm; 5°				
Lens geometry	Aspheric biconvex with 360° square edge				
Diopter range	From +8.0D to + 26.0D				
A constant	118.2				
Optimized constant	SRK/T = 118,7; SRK/2 = 118,9; Holladay1 sf = 1,60; HofferQ pACD = 5,39; Haigis a0 = 1,25; a1 = 0,40; a2 = 0,10				
Cylinder	0.75; 1.50; 2.25; 3.0; 3.75; 4.50; 5.25; 6.0.				





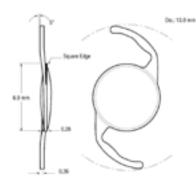
Hydrophobic IOLs

i-stream X Preloaded intraocular lens



- New generation hydrophobic material with high elasticity
- Minimized water content (< 1%)
- High value of Refractive Index (1.56)
- High value of MTF for excellent contrast sensitivity

Glistening free



Model	ISP60X			
Material	Hydrophobic			
Dimension and angulation	6.0 mm x 13.0 mm; 5°			
Lens geometry	Aspheric biconvex with 360° square edge			
Diopter range	From +9.0 D to +32.0D			
A constant	118.0			
Optimized constant	SRK/T = 118,8; SRK/2 = 119,1; Holladay1 sf = 1,66; HofferQ pACD = 5,45; Haigis a0 = 1,26; a1 = 0,40; a2 = 0,10			
Injector and incision size	2.2 mm with push or screw type from Medicel			

Instructions for use

Put the viscoelastic first from the back of the lens and then from the tip of the cartridge until complete filling of cartridge and chamber. Wait 10-15 sec before the implant, in order to activate the biofilm.

Close the cartridge.

Push the plunger up to the loading chamber, then pull it slightly back.

Go forward, screwing or pushing (depending on model) the plunger until the expulsion of the lens.

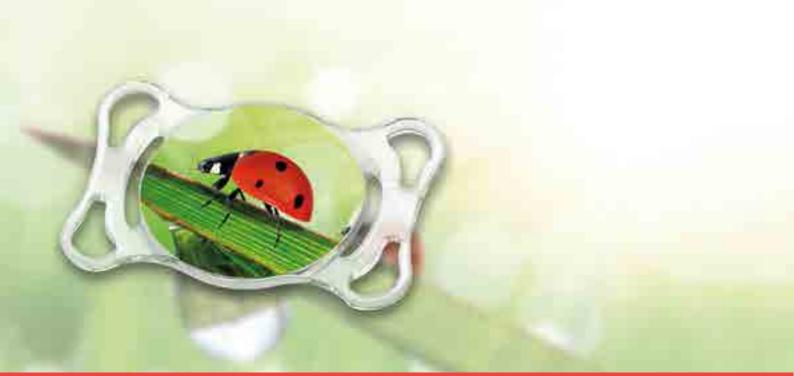








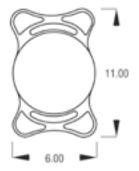
Lens is also available in not preloaded version i-stream gl



Hydrophilic IOL

i-stream hf

- Highly biocompatible material
- 25% water content



Model	ISP60HF			
Material	Hydrophilic			
Dimension and angulation	6.0 mm x 11.0 mm; 5°			
Lens geometry	Aspheric biconvex with 360° square edge			
Diopter range	From +1.0D to +40.0D			
A constant	118.2			
Optimized constant	SRK/T = 118,7; SRK/2 = 118,9; Holladay1 sf = 1,60; HofferQ pACD = 5,39; Haigis a0 = 1,25; a1 = 0,40; a2 = 0,10			

• Great elasticity

• Flexible for small incisions

Injectors



C E₀₅₄₆

- Maximum safety
- Suitable for hydrophilic and hydrophobic intraocular lens implantation
- Easy to use
- Ergonomic and resistant

Every I-glide injection set consists of a disposable injector and a sterile cartridge for implantation through mini-incisions (1.8 -2.0 -2.2 mm).



VISCOSURGICAL DEVICES



- Double Sterilization
- No refrigeration required
- Medium viscosity
- Cohesive behaviour for a controlled and easy injection
- Optimal stability in the anterior chamber and in the capsular bag
- Optical transparency
- High biocompatibility
- Perfect adhesion and protection of endothelial cells from mechanical damages

ialurOn[®] BioF Sodium Hyaluronate

	laluron BioF 1.0%	laluron BioF 1.4%	laluron BioF 1.6%	laluron BioF 1.8%
Substance	Sodium Hyaluronate	Sodium Hyaluronate	Sodium Hyaluronate	Sodium Hyaluronate
Concentration	10 mg	14 mg	16 mg	18 mg
Characteristic	Cohesive	Cohesive	Cohesive	Cohesive
Volume	1.1 ml	1.1 ml	1.1 ml	1.1 ml
РН	6.8- 7.6	6.8- 7.6	6.8- 7.6	6.8- 7.6
Osmolality	300 - 350 mOsm /kg	300 - 350 mOsm /kg	300 - 350 mOsm /kg	300 - 350 mOsm /kg
Molecular weight	App. 3.0M Da	App. 3.0M Da	App. 3.0M Da	App. 3.0M Da
Static viscosity	60.000 mPas	200.000 mPas	400.000 mPas	600.000 mPas
Dynamic viscosity	5.000 - 20.000 mPas	25.000 - 75.000 mPas	30.000 - 80.000 mPas	50.000 - 100.000 mPas)
Sterilization method	Steam and ETO	Steam and ETO	Steam and ETO	Steam and ETO
Origin	Biofermented	Biofermented	Biofermented	Biofermented
Cannula	27 G	27 G	27 G	27 G
Storage	2° - 25° C	2° - 25° C	2° - 25° C	2° - 25° C
Validity	3 years	3 years	3 years	3 years

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Registered office: Via A. De Gasperi 35 00165 Roma Italy

Manufacturing site: Via Fratelli Bandiera, n.c.c. 80026 Casoria (NA) Italy

info@md-tech.it www.md-tech.it

