

FINEVISION

TRIFOCAL OPTIC

PhysIOL

ADVANCED OPTICAL SOLUTIONS



FINEVISION

The first trifocal diffractive IOL

Technical specifications

Commercial name	Micro F		Pod F	
Material	25% hydrophilic acrylic		26% hydrophilic acrylic	
Overall diameter	10.75 mm		11.40 mm	
Optic diameter	6.15 mm		6.00 mm	
Optic	Biconvex aspheric (-0.11 μ SA) trifocal diffractive FineVision			
Filtration	UV & blue light			
Refractive index	1.46			
Abbe number	58			
Angulation	5°			
Additional power	+ 1.75D for intermediate vision & + 3.50D for near vision			
Injection system	Medicel Viscoject Bio 1.8 / 2.2 Medicel Accuject 1.8 / 2.0 / 2.1 / 2.2		Medicel Accuject 2.0 from 6D to 24.5D Medicel Accuject 2.1 / 2.2 from 25D to 35D	
Incision size	≥ 1.8 mm		≥ 2.0 mm	
Spherical power	10D to 35D (0.5D steps)		6D to 35D (0.5D steps)	
Square edge	360°			
Nominal manufacturer A constant	118.80		118.95	
Suggested A constant*	Interferometry	Ultrasound	Interferometry	Ultrasound
Hoffer Q: pACD	5.35	5.26	5.59	5.35
Holladay 1: Sf	1.60	1.48	1.83	1.57
Barrett: LF	1.78	-	1.86	-
SRK/T: A	118.80	118.59	118.95	118.73
Haigis**: a0; a1; a2	1.36; 0.4; 0.1	1.04; 0.4; 0.1	1.36; 0.4; 0.1	1.13; 0.4; 0.1

* Estimates only; surgeons are recommended to use their own values based upon their personal experience. Refer to our website for updates.

** Not optimized.

INJECTION GUIDELINES

The Medical Viscoject Bio 1.8 / 2.2 and Accuject 1.8 / 2.0 / 2.1 / 2.2 injection systems are recommended for implanting the FineVision lenses.

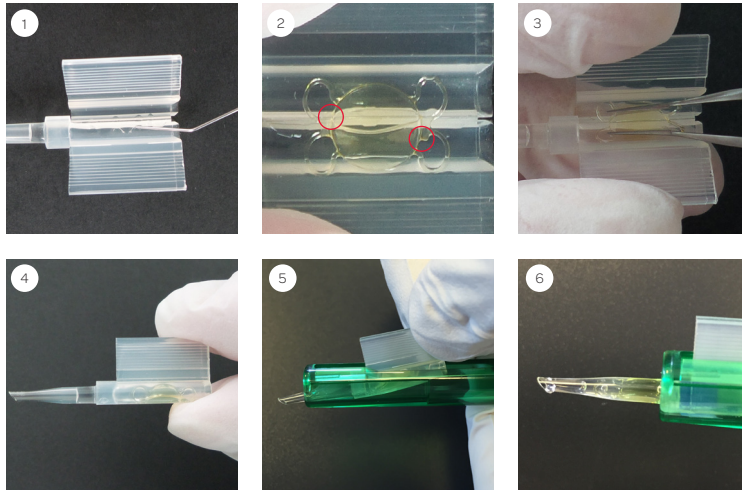
These fully single-use systems represent total reliability for safe and effective lens injections.

Their compact design with integrated cartridge enables a simple, predictable loading and positioning of the lens.

FineVision Micro F:

Medical Viscoject Bio 1.8 / 2.2 & Accuject 1.8 / 2.0 / 2.1 / 2.2

Guidelines with Viscoject:

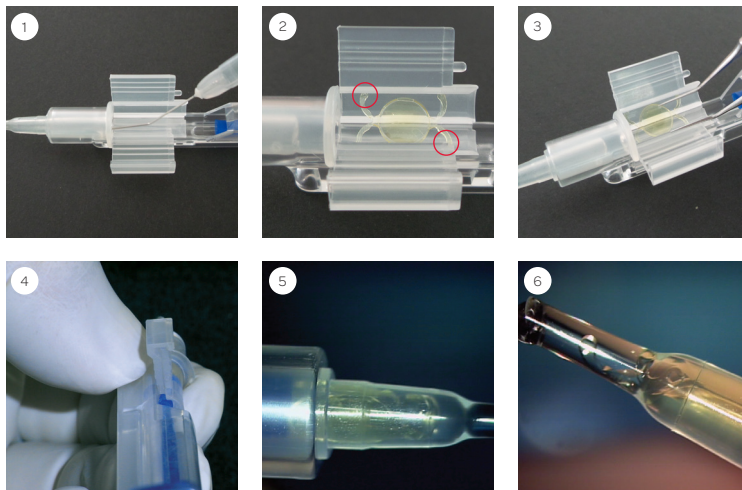


1. Apply viscoelastic into the tip and the loading chamber of the injector cartridge.
2. Remove the lens from the lens holder. Position the lens into the cartridge in such way that the two haptics with the notches are pointing at 1 and 7 o'clock.
3. Exert slight pressure onto the lens optic and make sure that all haptics are inside before further closing the cartridge.
4. Close the cartridge and check the position of the lens. Once the "click-lock" mechanism engages, the lens is securely loaded.
5. Engage the cartridge in the injector.
6. Press the injector plunger forward and push the lens into the conical tip of the cartridge. Pull the plunger back a few millimeters and then inject the lens in one continuous motion. For gently implantation, it is not necessary to push the plunger until the end of the cartridge.

FineVision Pod F:

Accuject 2.0 for lens diopters < 25D & Accuject 2.1 / 2.2 for lens diopters ≥ 25D

Guidelines with Accuject:



1. Apply viscoelastic into the tip and the loading chamber of the injector cartridge.
2. Remove the lens from the lens holder. Position the lens into the cartridge in such way that the two haptics with the holes are pointing at 1 and 7 o'clock.
3. Exert slight pressure onto the lens optic and make sure that all haptics are inside before further closing the cartridge. Close the cartridge and check the position of the lens.
4. Once the "click-lock" mechanism engages, the lens is securely loaded and ready for injection.
5. Press the injector plunger forward and push the lens into the conical tip of the cartridge.
6. Pull the plunger back a few millimeters and then inject the lens in one continuous motion. For gently implantation, it is not necessary to push the plunger until the end of the cartridge.

Distributed by



PhysIOL sa/nv - Liège Science Park - Allée des Noisetiers 4 - 4031 Liège - Belgium
t. +32 (0)4 361 05 49 - f. +32 (0)4 361 05 30 - info@physiol.be - www.physiol.eu

PhysIOL

ADVANCED OPTICAL SOLUTIONS



[FAR]



[INTERMEDIATE]



[NEAR]

FINE TECHNOLOGY

by PhysIOL

Innovative trifocal
technology

When
freedom
becomes
reality

The first and original patented diffractive trifocal optic

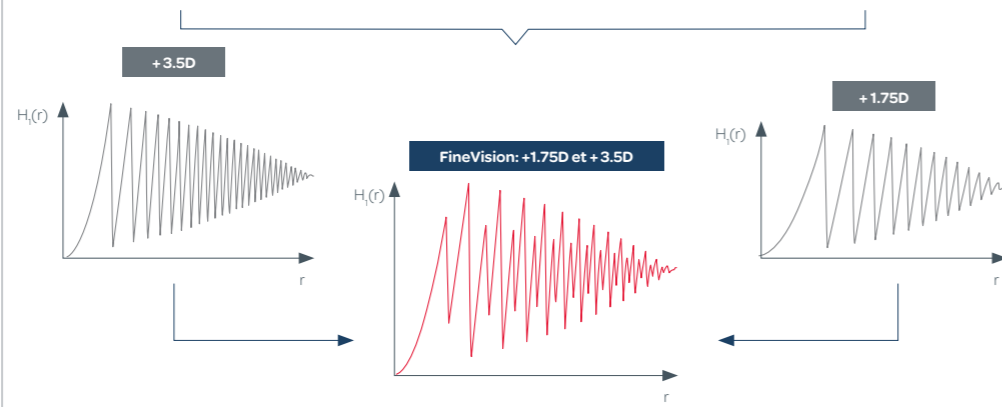
Combination of 2 profiles

The combination of two profiles* offers the patient an intermediate vision without impairing near and distance visual acuities.

This concept was designed in order to reduce the loss of light energy that any diffractive system causes.

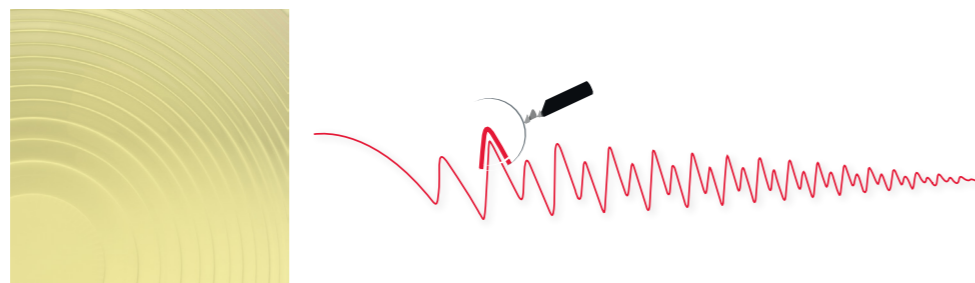
* Patented in Belgium: BE1019161 (A5), Europe: EP2503962 (B1), International: WO2011092169 (A1), United States of America: US 8,636,796 (B2), China: ZL201180002694.7, Japan: 5480980, Australia: 2011209315, Hong-Kong: 2503962

Profile n°1	Diffraction orders	Profile n°2
FAR (eg. +20D)	Order 0 (determined by IOL curvature)	FAR (eg. +20D)
NEAR +3.5D	Order 1	INTERMEDIATE +1.75D
LOST (not usable) +7.0D	Order 2 (always Order 1 doubled)	NEAR +3.5D



Combination of 2 technologies

The FINE technology is the first and only optic that combines both **Convolution** and **Apodization** technologies on the entire optic surface.



What do studies say?

"The second order of profile n° 2 reinforces order 1 of profile n° 1. This gain of energy provides more than 86% of useful light energy depending on the pupil aperture."

Reference:
Data on file with PhysiOL.

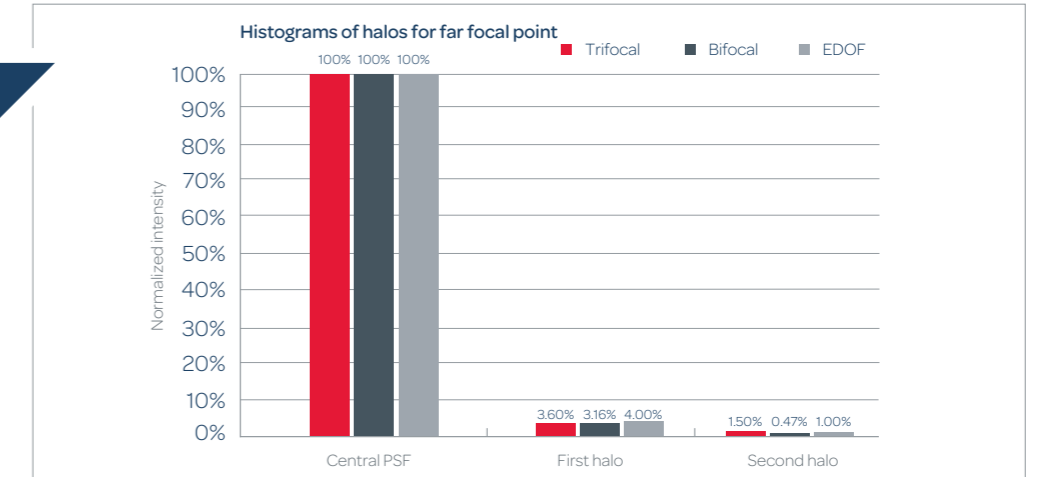
What do studies say?

"The PSFs (Point of Spread Function) data show similar halos intensity for FINE technology and EDOF IOL."

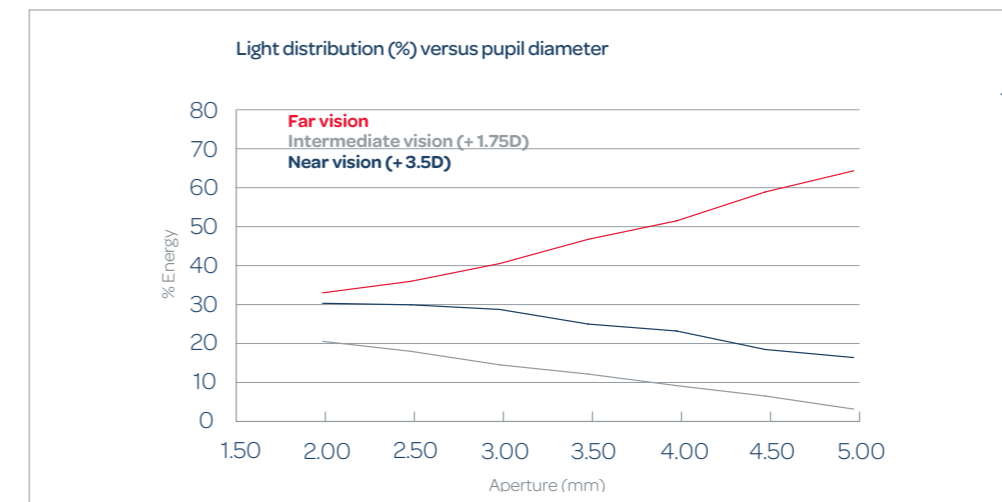
Reference:
Data on file with PhysiOL.

Convolution and Apodization benefits

Convolution reduces and limits photopic phenomena.



Apodization optimizes the percentage of energy for far vision with the opening of the pupil.

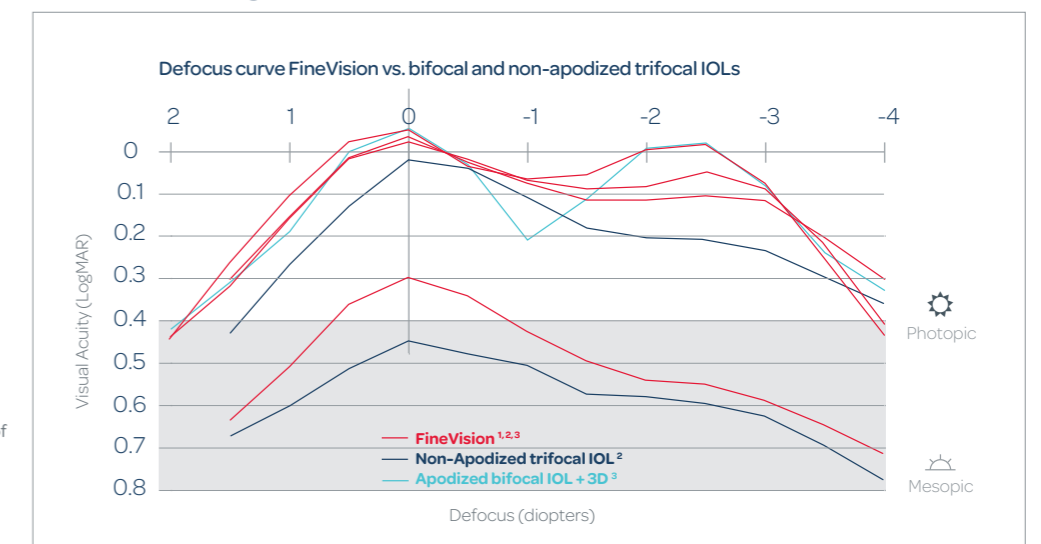


What do studies say?

"To match the eye's natural reflex, the percentage of energy allocated to the far vision increases with the opening of the pupil."

Reference:
D. Gatineau, et al.: Design and qualification of a diffractive trifocal optical profile for intraocular lenses, JCRS 2011; 37 : 2060-2067.

FINE technology: best visual acuities at all distances



References:

1. B. Cochener, MD, PhD et al.: Clinical outcomes with a trifocal intraocular lens: a multicenter study, JRS 2014; 30 (11): 62-768.
2. J. M. Martínez de la Casa, SEO 2014: Análisis de la calidad visual tras implantación de lentes intraoculares difractivas trifocales.
3. Soraya M.R. Jonker, MD et al.: Comparison of a trifocal intraocular lens with a D3.0 D bifocal IOL: Results of a prospective randomized clinical trial, J Cataract Refract Surg 2015; 41:1631-1640.