

Freeform Portfolio SIOU



Your optical laboratory deserves an exclusive brand with supreme quality. Discover our SIOU family "clicks" (designs) and be amazed by the technology.

The SIOU FreeForm System offers:

FreeForm Progressive Lenses that use Ray Tracing, Finite Elements, Asphericity, and Surface Smoothing technologies.

Each lens is individually calculated, taking into account the client's and frame's characteristics such as pupillary distance, vertex distance, pantoscopic angle, and frame curvature, creating a personalized lens.

There are several FreeForm progressive lens designs, depending on the intended use, which can be optimized for distance, intermediate, or near vision.

Free Form SIOU, the first FreeForm Lens software developed in Brazil.







HIGH-PERFORMANCE VISION Optical design developed to expand visual fields and reduce lateral distortions.

Provides precise transitions between distance

Provides precise transitions between distance, intermediate, and near vision.



CUSTOMIZED
MEASUREMENTS

Lenses designed based on individual user parameters such as PD, fitting height, and pantoscopic tilt, ensuring optimal use of the optical design and precise positioning of the vision zones.



ENHANCED NEAR

VISION



FLUCTUATION-FREE VISION



IMMEDIATE FOCUS



DRIVING COMFORT

Lenses with a specific design to expand the near-vision area

They optimize reading and the use of digital devices, reducing accommodative effort.

Technology developed to neutralize peripheral distortions in multifocal lenses.

Provides visual stability while walking or going down stairs, eliminating the sensation of unwanted movement.

Lenses designed to optimize focus dynamics across different distances, reducing visual response time and accommodative demand.

They provide an instant transition between distance, intermediate, and near vision.

Technology developed to enhance vision in driving environments.

Provides optimized distance and intermediate fields, ensuring clarity on the road, dashboard, and mirrors.



VISUAL BALANCE

Technology that maintains binocular stability, reducing differences between the eyes.

Ensures uniform image perception and greater visual comfort.



READING COMFORT

Technology developed to expand the near-vision area, providing stable clarity and reducing eye strain, ensuring greater comfort and efficiency during prolonged reading.



ENHANCED DISTANCE VISION

Technology that expands and optimizes the visual field for long distances, offering sharper images, reduced lateral distortions, and greater visual stability, ensuring comfort in outdoor activities and precise spatial perception.



SPORTS PRACTICE



ARTIFICIAL INTELLIGENCE

Technology developed to provide wide and stable visual fields during physical activities, ensuring precise spatial perception, reduced peripheral distortions, and greater visual comfort in fast movements and outdoor environments.

Advanced algorithms process visual parameters and simulate usage scenarios, generating predictive modeling of ocular behavior and delivering a personalized, precise, and easily adaptable design.



Freeform Portfolio SIOU





Available in all materials. **IVISION** equipment required Available fitting heights: 14 | 16 | 18 Addition power: +0.50 to +4.00

SIOU I.A Vision represents the pinnacle of lens technology, offering a complete experience with advanced design and personalization in every detail.

Combining artificial intelligence algorithms, it provides wide visual fields, stable focus, and smooth transitions between distance, intermediate, and near vision. Its optimized design promotes quick adaptation, binocular stability, and superior performance under different usage conditions.





Available in all materials.

IVISION equipment required

Available fitting heights: 14 | 16 | 18

Addition power: +0.50 to +4.00

SIOU I.A TECH is not just a lens; it is an extension of your world. With an innovative and elegant design, these lenses adapt perfectly to your lifestyle.

In today's fast-paced world, technology is constantly evolving, and with SIOU I.A TECH, your vision evolves with it. This progressive lens, featuring a digital design assisted by artificial intelligence, optimizes visual fields, reduces peripheral distortions, and ensures quick adaptation with greater binocular stability.

Classification	
Distance Vision	*****
Intermediate Vision	****
Near Vision	****
Comfort	*****
Adaptation	*****









You who have always sought freedom now have total freedom in every direction.

Progressive lens with a digital design that continuously distributes power across distance, intermediate, and near vision, offering greater freedom of eye movement in all directions.

The optimized geometry significantly reduces the floating effect, minimizes peripheral distortions, and enhances binocular stability.







Ray Tracing technology applied to the essentials: balanced vision at all distances.

Progressive lens with a digital design developed to expand the intermediate and near vision areas, providing functionality suited to the daily needs of presbyopic users.

It uses Ray Tracing calculation technology, which optimizes power distribution and reduces peripheral distortions, ensuring a balanced visual experience at all distances.

Classification	
Distance Vision	****
Intermediate Vision	****
Near Vision	****
Comfort	****
Adaptation	****









Much greater comfort with minimal peripheral fluctuation.

Progressive lens designed to provide superior visual comfort, with a design that minimizes the floating effect and reduces peripheral distortions. Its advanced geometry efficiently distributes power across distance, intermediate, and near vision, keeping the sides practically free from astigmatism. Recommended for users with active routines and outdoor activities, it ensures binocular stability and comfortable adaptation in different environments.

Aspheric lenses; User initials markings; Variable corridor.







Design recommended for first-time users for its smoothness and easy adaptation.

Progressive lens developed for first-time users, featuring a smooth transition design that promotes quick adaptation.

It provides well-defined and wide visual fields for distance, intermediate, and near vision, offering binocular stability and visual comfort from the very first uses.

Classification	
Distance Vision	*****
Intermediate Vision	****
Near Vision	****
Comfort	****
Adaptation	****









Balanced progressive design with excellent performance across all visual fields.

Progressive lens with a balanced design, engineered to deliver consistent performance at all distances.

The power distribution promotes stable visual fields for distance, intermediate, and near vision, while astigmatism is uniformly controlled, ensuring greater comfort and natural adaptation for the wearer.







# Exceptional comfort with minimal peripheral fluctuation.

Progressive lens developed to provide visual stability and significantly reduce the floating effect.

Its design optimizes the distance and intermediate visual fields, expanding the useful areas and minimizing lateral distortions.

Recommended for active users, it ensures continuous comfort in different environments, both indoors and outdoors.

Aspheric lenses; User initials markings; Variable corridor.

Classification	
Distance Vision	*****
Intermediate Vision	****
Near Vision	****
Comfort	****
Adaptation	****









A balanced lens with minimal marginal astigmatism.

Designed for young presbyopes, SIOU YOUNG offers an expanded intermediate field and an optimized near zone, ensuring visual comfort during prolonged use of smartphones, tablets, and other digital devices. It is a solution created for the modern routine, providing stable adaptation and outstanding performance at short and medium distances.

Aspheric lenses; User initials markings; Progressive displacement (decentration).







Available in all materials
Addition power: +0.50 to +4.00

Accessible multifocal lens for those seeking practicality Simple, functional, and ideal for everyday use.

Progressive lens developed to offer a practical and functional solution for everyday visual needs.

It provides essential distance, intermediate, and near fields, ensuring suitable performance for daily activities with simple and efficient adaptation.

Classification	
Distance Vision	*****
Intermediate Vision	*****
Near Vision	*****
Comfort	*****
Adaptation	*****









Made for an outdoor lifestyle, especially for sports activities.

Progressive lens developed for users with an active lifestyle, especially in outdoor and sports environments.

Its design optimizes distance and intermediate fields, providing higher optical quality, visual stability, and precise spatial perception during movement.

Lentes asféricas; Marcações das iniciais do usuário; Altas curvaturas Bases 6.00, 700 e 8,00

Classification	
Distance Vision	*****
Intermediate Vision	****
Near Vision	****
Comfort	*****
Adaptation	****









Available in all materials
Addition power: +0.50 to +3.00

Progressive lens that combines precision and comfort, designed for professionals such as office workers, teachers, and musicians.

The optimized power distribution expands the useful work area and reduces eye strain at short and medium distances, providing greater comfort for activities such as reading, computer use, and office tasks.

It ensures efficient adaptation, binocular stability, and consistent visual performance during long periods of use.

Aspheric lenses User initials markings







# SIOU READER

Available in all materials
Minimum fitting height: 18

## SIOU READER SHORT

Available in all materials
Minimum fitting height: 14

Specially designed for work environments, SIOU READER provides visual comfort throughout long working hours.

Occupational lens developed to optimize near and intermediate vision, providing stable focus for activities such as reading, computer use, and office tasks. Its design reduces accommodative effort, offering greater visual comfort during long working hours and enhancing productivity in the workplace.

Aspheric lenses
User initials markings
Working distance options: 0.80 m | 1.0 m | 1.3 m | 2.0 m | 4.0 m

Classification	
Distance Vision	
Intermediate Vision	*****
Near Vision	*****
Comfort	****
Adaptation	*****









Available in all materials

Lenses for all ages. Everyone using the same technology!

Single-vision lens suitable for all ages, designed with aspheric geometry on the inner surface to improve power distribution, reduce spherical aberrations, and ensure greater clarity across the entire visual field.

Its design optimizes thickness, making the lens thinner and lighter, resulting in better aesthetics and greater comfort for daily use.

Aspheric lenses User initials markings

Classification	
Comfort	*****
Adaptation	*****







Available in all materials 22 mm transition radius in the blur zone 12 mm in the diameter zone.

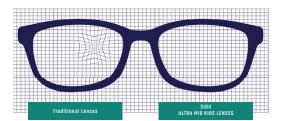


Single-vision lens that helps control the progression of myopia

Design developed to control peripheral defocus, reduce ocular elongation in children, and slow the progression of myopia.

A prevention for the future, seen from your child's perspective.

Aspheric lenses Myopia correction Adaptation to the lenses in less than 10 days Slows myopia progression by up to 70%











We present SIOU MYO TEENS, an innovation in the field of myopia control.

Specifically designed to address myopia, this revolutionary lens provides an evolutionary and flexible approach to enhancing visual performance.

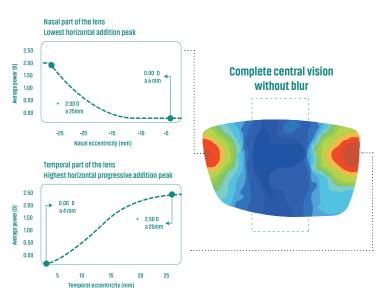
Aspheric lenses User initials markings 20 MM e 25 MM

Available in all material.

Adaptação

Myopia Control













Aspheric bifocal lenses with an almost invisible dividing line.

Aspheric bifocal lenses of the Ultex and Kriptok Freeform types, developed with a nearly imperceptible transition layer. This design prioritizes aesthetics without compromising functionality, providing effective correction for distance and near vision with greater visual comfort.



Available in all materials Addition power: +0.50 to +4.00

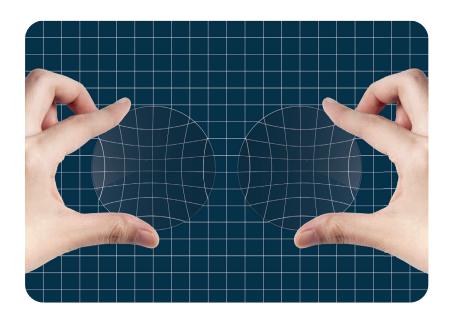
Aspheric lenses Nearly imperceptible transition layers

Classification		
Distance Vision	*****	
ntermediate Vision	*****	
Near Vision	****	
Comfort	****	
Adaptation	****	

# **Aspheric Lenses**

More comfort and less visual distortion.

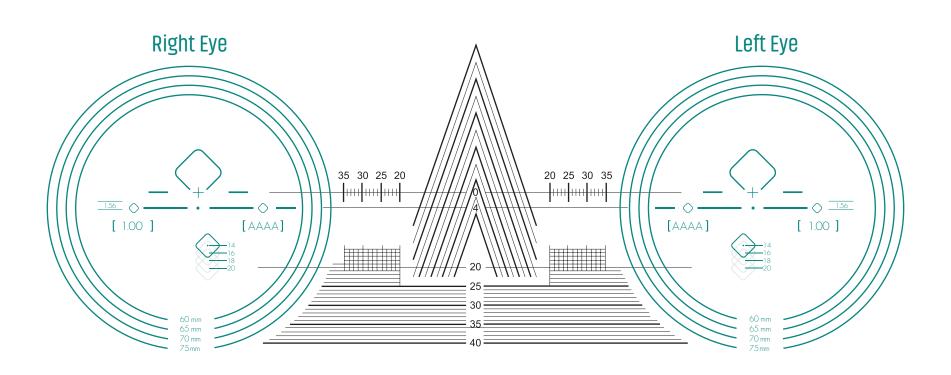
Although aspheric lenses have curved surfaces, they are not the same as spherical (traditional) lenses. This difference in shape makes an aspheric lens more precise and with fewer visual aberrations than a spherical lens.







# Mounting Template - SIOU Lenses





CO<sub>2</sub> Laser

Your lenses made more personalized with exclusive engravings.

SIOU introduces to the optical market the laser engraving machine for ophthalmic lenses, the LENS ENGRAVER. It can mark both internal and external surfaces.

Available in two versions: automatic and manual.

# **Technical Specifications**

Output power	220V/6A
Number of phases	Single-phase
Frequency	50/60 Hz
Laser wavelength	I 0.64 μm
Materials	All materials (except crystal)
Laser type	CO <sub>2</sub>
Service life	45,000 hours
Cooling	Air-cooled
Minimum/maximum temperature	10°C/40°C
Communication	VCA/OMA
Compressed air	4 bar (58 psi)
Industrial PC	B&R
Clamps	1

# Weights and Measurements

CO <sub>2</sub> Laser	200kg
Width	500mm
Height	1.200mm
Depth	1.150mm

#### Automation

Width	1.200mm
Height	1.630mm
Length	2.100mm
Compressed air	6 bar (87 PSI) 75 I/min

# Benefits

- Low maintenance
- High reliability
- High engraving quality
- · No consumables required
- Fully programmable software
- Custom design development
- Manual model compatible with automation
- Compatible with AutoCAD, .dxf, and .dwg files
- · Precision marking on ophthalmic lenses
- Fully customizable lens engravings
- Power adjustment according to material (refractive index)





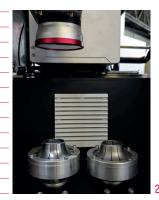
# Laser AT-AT UV v.2

Highest engraving precision through UV technology.

State-of-the-art laser engraving machine for ophthalmic lenses, the LENS ENGRAVER AT-AT UV  $^{v.2}$  delivers enhanced engraving precision with micro dots, geometric shapes, and complex logos.

## **Technical Specifications**

Output power	220V/I0A
Number of phases	Single-phase
Frequency	50/60 Hz
Laser wavelength	355 nm
Materials	All materials
Laser type	UV
Service life	100,000 hours
Cooling	Distilled water cooling
Minimum/maximum temperature	15°C/25°C
Communication	VCA/OMA
Compressed air	4 bar (58 psi)
Industrial PC	B&R
Clamps	2



clamps

## Benefits

- · Low maintenance
- · Higher point resolution
- 11 times superior to the CO<sub>2</sub> Lens Engraver
- High reliability
- High engraving quality
- No consumables required
- Twice the speed compared to the CO<sub>2</sub> Lens Engraver
- · Fully programmable software
- · Custom design development
- Manual model compatible with automation
- Compatible with AutoCAD, .dxf, and .dwg files
- Precision marking on ophthalmic lenses
- Fully customizable lens engravings
- Power adjustment according to material (refractive index)

# Weights and Measurements

UV Laser Att	230kg
Width	500mm
Chiller	30kg
Height	1.200mm
Depth	1.150mm

#### Automation

Width	1.200mm
Height	1.630mm
Length	2.100mm
Compressed air	6 bar (87 PSI) 75 I/min



