# ARYA

**PROGRESSIVE - SINGLE VISION - ANTIFATIGUE** 



#### ADVANCED PAL OPTIMIZATION BY INDIVIDUAL HABITS IMMERSIVE VR EXPERIENCE



## **CREA ARYA**

Arya begins a new era of progressive lens customization. Thanks to EYESHUTTLE new visual experience within the Metaverse, clients will be immersed in an engaging "virtual universe", allowing them to customize ARYA power distribution, based on their own vision habits. Clients will actively participate in the ARYA design process, they will not just buy a lens. Let them join the metaverse and live a customer experience never seen before, this progressive lens will stand out from the others!

EYE-SHUTTLE eye-tracking sensors assess eyes and head motions in a 3D environment. The result is a frequency map representing the most frequently used lens zones. Computing all these data, optical power can be redistributed according to gaze dynamics of the user, making ARYA much more comfortable than a standard progressive lenses. You will no longer need questionnaires to hypothesize which lens areas clients use the most; now you will finally be able to measure it in real time, in the 3D space.

#### **PERFORMANCE POWER MAP** CYLINDER MAP personalization 0.00 0.00 0.25 0.50 0.50 0.75 1.00 1.25 1.00 1.50 1 75 LOW VALUE 2.00 1.50

#### **TECHNOLOGIES**





#### **SOFTWARE**



#### DESIGN PARAMETERS



















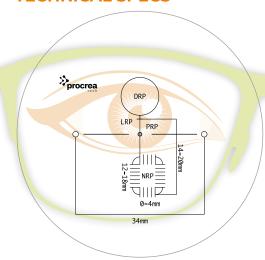




Market Segment	Туре	Allowed Materials	Precalibration	Personalization	
High-end progressive	Adaptive	All	Yes	Yes	

Prism Ref. Point (PRP)	Distance Ref. Point (DRP)	Layout Reference Point (LRP)	Inset	Near Ref. Point (NRP)	_	Max. Diameter	Sphere Range	Cylinder Range	Addition Range
Geometrical Center. Allowed Range 0 - 12 mm	+10 mm	+4 mm	0 - 4 mm smart inset	12 - 18 mm	14 - 20 mm	80 mm	-30 / +25 dpt	-8 / +8 dpt	0.75 / 4.50 dpt

#### **TECHNICAL SPECS**

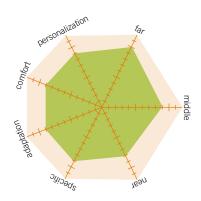




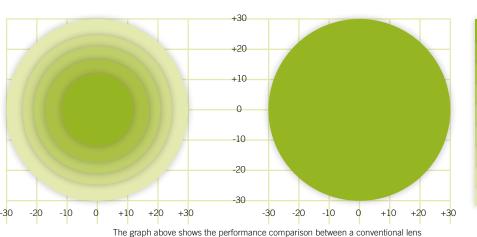
## **CREA ARYA SV**

ARYA SV is an advanced evolution of a multi-aspheric ophthalmic lens. Leveraging the Eye-Shuttle technology, it is possible to customise the lens asphericity according to the person's unique eye movement patterns. Thanks to the eye-tracking sensors of the virtual reality headset and the use of dedicated algorithms, a frequency map representing the most frequently used lens zones is generated. By computing all this data, it is possible to modulate the multi-sphericity of ARYA SV according to the person's natural eye movements, bringing visual comfort to a higher level. Moreover, the person will perceive sharper vision thanks to this customised spherical aberration compensation.

#### **PERFORMANCE**



#### **CONVENTIONAL SV**



The graph above shows the performance comparison between a conventional lens and a Crea ARYA SV lens of -5.00D CR-39 when viewing away from optical center.

#### **TECHNOLOGIES**





#### **SOFTWARE**



#### **DESIGN PARAMETERS**

















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#### **TECHNICAL SPECS**

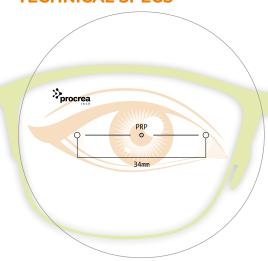
**CREA ARYA SV** 

0.00

0.25

0.50

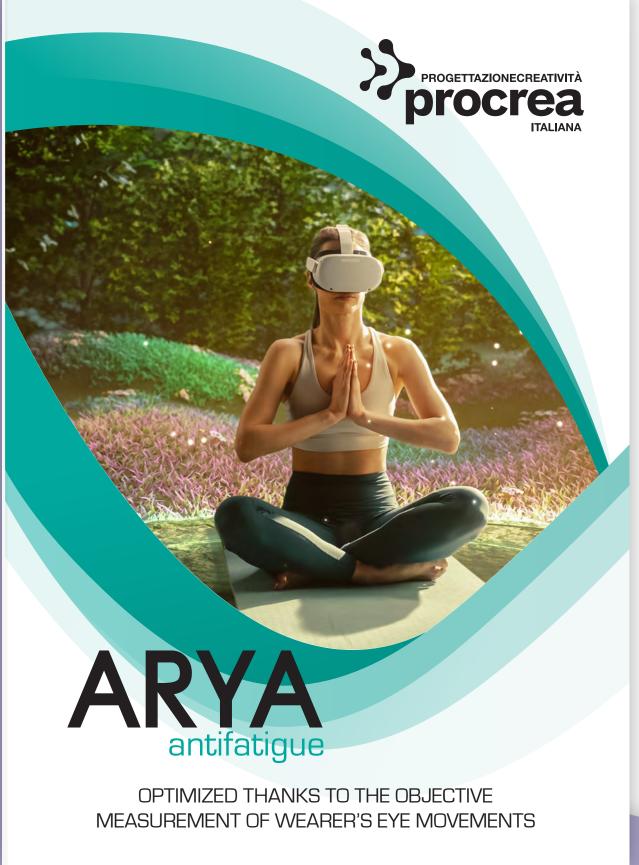
0.75



Market Segment	Allowed Materials	Precalibration	Personalization	Prism Ref. Point (PRP)	Max. Diameter	Sphere Range	Cylinder Range
High-end single vision	All	Yes	Yes	Geometrical Center Allowed Range: 0 - 15 mm	80 mm	-30 / +25 dpt	-8 / +8 dpt

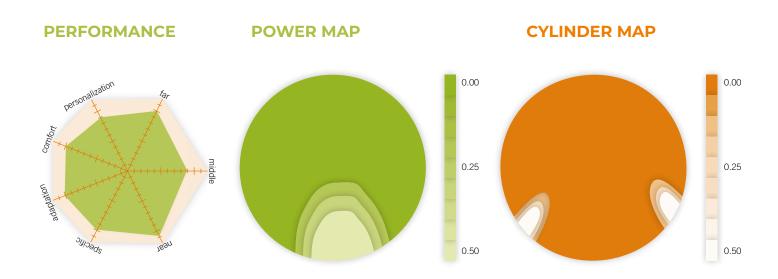
**OPTIMIZED THANKS TO** 

THE OBJECTIVE MEASUREMENT



## **CREA ARYA ANTIFATIGUE**

ARYA ANTIFATIGUE completes the ARYA designs series that leverages the Eye-Shuttle virtual reality headset. It is the first anti-fatigue lens optimized thanks to the objective measurement of wearer's eye movements and it features a light power progression, which creates a very wide and comfortable near zone. ARYA ANTIFATIGUE is available with an option of five additions (0.25, 0.50, 0.75, 1.00, 1.25 - 1.50 Dpt) that support the person's accommodative system to relax near vision with no adaptation required. Thanks to the eye movement patterns detected by Eye-Shuttle's eye-tracking sensors, the addition power distribution is customized and unique for each wearer to ensure unparalleled visual comfort. This lens supports the accommodative system by relaxing the ciliary muscle; therefore, it is perfect for early presbyopes and teenagers with accommodative insufficiency.



#### **TECHNOLOGIES**





#### **SOFTWARE**

**Market Segment** 

High-end

Anti-Fatigue



#### **DESIGN PARAMETERS**















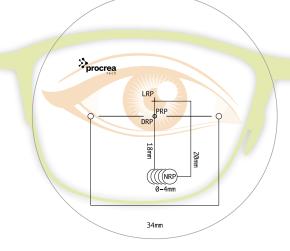


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Equipped Lens



#### **TECHNICAL SPECS**



Prism Ref. Point (PRP)	Distance Ref. Point (DRP)	Layout Reference Point (LRP)	Inset	Power Boost	Near Ref. Point (NRP)	Min. Fitting Height	Max. Diameter	Sphere Range	Cylinder Range
Geometrical Center. Allowed Range 0 - 15 mm	+ 10 mm	+ 4 mm	0 - 4 mm auto inset	0.25 - 0.50 - 0.75 - 1.00 - 1.25 - 1.50 dpt	18 mm	20 mm	80 mm	-30 / +25 dpt	-8 / +8 dpt



### HEADQUARTERS

ITALY
VIA DEI CALAFATI 9/A
70056 MOLFETTA (BARI) ITALY
PH. +39 080 919 09 30
FAX +39 080 919 09 25
info@procreatech.com

**COMMERCIAL OFFICE** 

BRAZIL
BRAZIL - SAO PAULO
RUA PULINO DE BRITO 597
brazil@procreatech.com

procreatech.com