

| PRO CREA           | TECHNOLOGIES                                   | SOFTWARE                      | PROGRESSIVE<br>Design                | SIZE<br>Design                     | SINGLE VISION<br>Design                            | KIDS<br>Design        | DIGITAL FAMILY<br>Design         | ANTI FATIGUE<br>Design                 | OCCUPATIONAL<br>Design          | BIFOCAL FREE<br>Form Design              |                               | MARKING<br>Charts                            |
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| who 2              | WRFT <mark>12</mark>                           | eye - shuttle <mark>28</mark> | crea <mark>40</mark><br>arya         | crea anima<br>size <mark>60</mark> | arya sv <mark>64</mark>                            | crea 72<br>myocontrol | help <mark>76</mark><br>young 76 | crea help 84                           | crea<br>room 88                 | crea round form <mark>94</mark><br>24/28 | crea size 2.0 98              | progressive <mark>102</mark><br>design       |
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## PROCREA TECH



### **PROCREA TECH:** FREE FORM DESIGN AND ITALIAN ENGINEERING

ProCrea is the new Free Form Lens Design Software Company from Italy. We were born in 2012 from a group of skilled people with a long-term experience in different fields of the opthalmic industry.

We provide exclusive designs, engineered in ITALY for single vision, bifocal and progressive addition lenses to make your independent Lab compete with market's top players, with high quality products.

We've developed a new optimization model, called WFRT (Wavefront Ray Tracing Technology), to give your products the best optical quality.

All designs follow a long test phase in a real lab environment before being released, in order to find out all possible production issues. Then, the final test is carried out by a group of people with different visual defects, in order to evaluate the real performance of the lenses. Thanks to our wide lab experience, we provide full support service, not only for calculation-related issues, but also for cutting, polishing and engraving.

We bring Italian style into the global Free Form market for your new experience with digital lenses.

The made-in-Italy designs for your Lab.

# PROCREA TECH

### **PROCREA TECH:** WE ALSO PROVIDE RX LENSES

We have a large RX lab to surface all lenses with the same geometries of the Free Form designs catalogue. Therefore, in case of production peaks or high index lenses and special lenses (low vision, lenticular Free Form, etc.) necessities, ask us for our RX lenses catalogue.



## PROCREA TECH



### WHY CHOOSE PROCREA TECH

All independent labs that decide to use ProCrea Tech's designs are able to compete with the major players in the opthalmic industry. Infact, ProCrea Tech, along with basic and personalized Single Vision and PAL designs, proposes, for the first time in the Free-Form market, unconventional products, such as extremely optimized Progressive Lenses, Crea Size 2.0, a new center thickness reduction technique for plus lenses, Crea Lenticularization, an edge thickness reduction tecnology for minus lenses, bifocal free form designs, Crea Anima revolutionary design powered with A.I. Technology (Artificial Intelligence) and much more.

Many other products will be launched in the coming months while fully respecting ProCrea's philosophy: UNCONVENTIONAL FREEFORM FOR UNCONVENTIONAL COMPANIES.





### WORLDWIDE LOCATIONS PROCREA TECH

ProCrea means Italian engineering without borders. We export our know-how around the world. Many independent Rx labs use ProCrea technology. We also provide "white label" service for wholesale suppliers.





### **X NFRT** TECHNOLOGY

### WFRT TECHNOLOGY



We introduce WFRT®, "Wafefront Ray Tracing Technology", the exclusive optimization model developed by Pro.Crea.

In the model the lenses and the eyes are placed at their respective position in the real world. Along with the rx data, all parameters provided by the user are taken into account, including back vertex distance, pantoscopic angle, frame wrap and working distance. A bundle of rays is traced from different locations depending on the gaze direction and the position of the objects in the real world. The resulting wavefront is then evaluated at the exit pupil, at a finite size, and then optimized for the best vision quality experience for the user.







### **DNA PATCH CALCULATION**

The DNA PATCH CALCULATION is featured by a surface with overlapping optimization levels, designed with a micro patch approach and merged with each other thanks to the use of genetic algorithms.



This technology provides local and microscopic optimizations for reducing aberrations in the peripherical areas, thus miminimizing the "sway effect" and improving the overall comfort. Tests made on a first model have shown about 30% of reduction in lateral aberration compared to a lens designed with traditional methods along with a noticeable decrease of sway sensation while assuring a large visual field.







dna patch calculatio





### **AI TECHNOLOGY**

Lens design is powered with AI (Artificial Intelligence) to reduce at minimum aberrations at periphery and satisfy design quality constraints with the purpose provide extreme clear vision and comfort.

Thanks to AI technology, lens design guarantees a minimum functional area for all calculations.







### PUPYL OPENING TECHNOLOGY

Light conditions affect pupil diameter by varying amount of light going through the eyes. On the one hand, intense light cause an automatic reduction of the pupil diameter, while, on the other hand, dark light makes the pupil dilate in order to maximize the amount of incoming light.

The PUPYL OPENING TECHNOLOGY provides a support to the mydriasis process, thus ensuring natural and comfortable vision. Its special molecule-like composition allows to filter the amount of light going through the lens based on an optimal pupillary aperture, calculated according to the wearer's prescription. In this way, the designed lens supports the vision during the natural pupil's dilation and contraction.





### MAX VOLUME

The spread of electronic devices such as smartphones, computer and tablets has multiplied the number of potential near working distances for a presbyope. Unlike in the past, when there was only a standard distance



MAX VOLUME technology exploits the visual behavior detected by I-CHECK app to optimize the lens and increase the perceived vision field (in depth and width) for all distances resulting, as well, in expanded volume for the progressive lens wearer. Unlike conventional progressives, MAX VOLUME assures a clear and natural vision with no need to move the head and makes more comfortable the use of electronic devices.







### **SMART INSET**

SMART INSET is a value added technology to customize the inset value on progressive lenses. Whereas standard approaches normally consider only addition for inset customization, SMART INSET takes into account

most of the PoW (Position-of-Wear) parameters such as interpupillary distance, fitting height, pantoscopic angle, back vertex distance, frame wrap and near working distance. The designed lens is thus more comfortable both for far and near vision.

### **AUTO INSET**

AUTO INSET is the standard approach based on addition to customize the inset on progressive lenses.







### **NOMINAL POWER**

NOMINAL POWER is provided by ProCrea as a baseline technology for entry-level progressives, office, anti-fatigue and bifocal design. The standard algorithm applies a basic optimization to the surface in order to reduce side aberrations at the minimum. Given prescription power is kept and no recalculation is done.











### EYE SHUTTLE

**EYE SHUTTLE is a customizable virtual reality** headset coupled with an app, developed by the ProCrea Tech team, which will immerse your clients in a unique and engaging virtual universe. Until now, due to the lack of objective measurement methods, the most frequently used lens zones have been simply approximated or assumed just considering the person's lifestyle only. Instead, the winning strategy is to objectively measure these zones thanks to high precision sensors.

EYE SHUTTLE system, through its eyetracking readers, records eyes and head movements and generates a frequency map linked to a single person only.

This map represents the lens areas mainly used by the wearer and allows a customization of the progressive lens power distribution as never seen before.

### **Measured Parameters:**



### OFTWARE

addition. eye-brain interaction is In investigated through scanning the eye and head movements simultaneously. All these measurements are taken while the person naturally observes the metaverse, looking at an immersive 3D environment customized by **ProCrea.** A unique code, identifying all the user parameters, is provided and sent to the lens lab, where ProCrea's LDS software customizes ARYA's power distribution by computing all these information. In conclusion, ARYA features all the surface optimization algorithms achieved by ProCrea, but it performs at its best by leveraging Eye Shuttle technology.

### EYESHUTTLE PROVIDES THE BEST POSSIBLE PROGRESSIVE LENS CUSTOMIZATION BY ANALYZING EYE AND HEAD MOVEMENTS THROUGH VIRTUAL REALITY HEADSET SENSORS.

Joining the metaverse is a singular and unforgettable purchasing experience and your clients will actively participate in the ARYA design process. They will not just buy a lens.



### THE METAVERSE

- Advanced PAL optimization by individual habits
- Collect data
- Determine vision behaviour
- Simulate real scenarios

VR

### THE PLATFORM

- Pico VR Headset with eye tracking features
- Web based platform for managing measurements
- ProCrea FF LDS to calculate optimized Arya PAL

### PICO VR HEADSET

- Great VR Experience for the user
- Eye tracking features
- Exclusive EyeShuttle application for data collection

### WEB BASED PLATFORM

- Opticians management for the Lab
- Customers and Measurements management for the Optician
- Real-time preview of calculated vision profile
- Direct integration with ProCrea Arya calculation through unique code generation







OFIWARE

### I-CHECK

It's a new concept of taking wearer's parameters. It leverages the tools of traditional measuring apps to take standard parameters such as interpupillary distance, fitting height, pantoscopic angle and frame wrap in a renovated and improved user interface. It adds the possibility to measure the near interpupillary distance and make a dynamic analysis of the near vision behavior of the wearer by recording his head movements while following a point moving on the screen. Background analysis is performed on powerful cloud system with AI (Artificial Intelligence) techniques. Resulting calculation is then used in extreme optimization of the new PAL design Anima to get best shaped geometry for each wearer.

**Measured Parameters:** 



It is able to read, analyze and process visual and postural activities while the wearer is vising near vision zone.

In addition of taking traditional PoW (Position-of-Wear) parameters such as interpupillary distance, fitting height, back vertex distance, pantoscopic angle, etc., I-CHECK allows to take near interpupillary distance. Moreover, the innovative vision video detector collects, analyzes and processes visual and postural activities data for near vision. All data are therefore elaborated in a cloud environment to customize the lens according to frame, facial and habits parameters.

### I-Check in 4 steps

- 1. Far vision parameters measurement
- 2. Near vision habits video detection
- 3. Cloud data processing
- 4. Unique code generation

### **Near Vision Video Detector**

The Near Vision Video Detector consists in a simple exercise in which the wearer is only required to follow a point moving on the screen. That process allows to catch even the most imperceptible variables related to near vision habits especially while using digital devices. Some of such variables are:

- Posture and distance at which the device is held
- Head rotation
- Eyes movement
- The combination of both head and eyes movements.



### SOFTWARE



### CREA REALITY

CREA REALITY is an app for a customeroriented interactive sale advise. It's powered by augmented reality to help the optician in high-value ophthalmic lenses sale process.

The app is able to simulate the behavior of all kind of ophthalmic lenses in the market: Progressive, Bifocal, Single Vision, Indoor, polarized photochromic and major coatings. The scope is to let the customer experience and appreciate in real-time and in a real-life environment the benefits of a specific lens or coating compared to a cheaper one.

You can use existing pictures from the gallery or device camera and live images to create your environment and then follow a guided selection process to choose the right product.

CREA REALITY supports all major mobile operating system including iOS/Android and can be integrated with existing onpremises order systems for immediate order sending from the app.

### **Progressive Design**

The App simulates the vision with Progressive Lenses. According to the selected product, optical zones (distance, intermediate, near) and aberrations change in size.

### Photochromic Lenses

CREA REALITY emulates the performance of photochromic lenses. It switches gradually from clear lens to sunglasses according to the light conditions and supports gray and brown styles.

### Coatings

The app simulates the benefits of AR, Hydrophobic, hard, anti-static and no fog coatings and highlights the contrast improvement.

### **Anti-Fatigue lenses**

The app emulates an Anti-Fatigue lens. Eye rotation and the three optical zones (distance, intermediate, near) are simulated by varying device orientation.

### Indoor Lenses

The app simulates the benefits of indoor lenses for wearers requiring extreme comfort for intermediate and near vision.

### **Polarized Lenses**

The app emulates polarized lenses and their benefits: visual contrast improvement, reduction of the annoying reflection and better overall comfort.

### **Biform Lenses**

The app emulates freeform bifocal lenses. By varying device orientation it is possible to simulate eye rotation and therefore mimic far and near vision.






# **CREA FF LDS**

Your secure online LDS.

Crea Free Form LDS is the ProCrea's online calculation system. It is based on a powerful redundant Linux cluster and it is hosted on an high power server farm distributed in multiple wordwide locations.

Customers use the Crea Free Form Client on their server to establish an TLS connection with the system and exchange calculation files.

The system follows the guidelines of the "VCA Data Communication Standard v3.11" for LDS file exchange and processing.

Т

The following calculation features are shared among all available designs.

| <b>Best Ellipse Calculation</b>                   | Automatic Inset and Corridor   |  |  |  |
|---|--|--|--|--|
| When you provide a frame shape the                | On high-end PALs, the optimum inset  |  |  |  |
| best ellipse is calculated to optimize            | and corridor length are choosed based  |  |  |  |
| center thickness.                                 | both on frame and user parameters.   |  |  |  |
| Based on power and both user and frame parameters | <b>Unwanted Astigmatism Minimization</b><br>The lowest level of unwanted astigmatism<br>is guaranteed on PALs based on<br>prescription addition. |  |  |  |
| Images  | Smart Auto Decentering   |  |  |  |
| A bundle of images can be requested               | Best horizontal and vertical offset in   |  |  |  |
| for each job, including thicknesses               | respect to the frame shape center is   |  |  |  |
| preview and power/cylinder maps on                | automatically calculated to minimize   |  |  |  |
| final shape.                                      | final ellipse size.  |  |  |  |









### EYE SHUTTLE METAVERSE

- ADVANCED PAL OPTIMIZATION
  BY INDIVIDUAL HABITS
- DETERMINE VISION BEHAVIOUR
- SIMULATE REAL SCENARIOS

# rameters



Distance between lenses

Pantoscopic Angle

Wrap Angle



Interpupilar Distance

Fitting Height

Lens Diameter



### Vertical Box

Horizontal Box

Working Distance



Back Vertex Distance

Eyes Rotation





ARYA POWERED EYE SHUTTLE

Eye-Shuttle begins a new era of progressive lens customization. Thanks to this 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, your progressive lens will stand out from the others!

# EYESHUTTLE

www.procreatech.com

PROGETTAZIONECREATIVITÀ

FREEFORM

DESIGNS

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.

**SOFTWARE** 

**EYESHUTTLE** 

**POWER MAP** 

### **CYLINDER MAP**







### **TECHNICAL SPECS**



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

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



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# **CREA ANIMA**

THE REVOLUTIONARY DESIGN INTRODUCED BY PROCREA

POWERED WITH (AI) ARTIFICIAL INTELLIGENCE

NEAR VISION BEHAVIOUR CUSTOMIZATION EXTREMELY MINIMIZED ABERRATIONS MINIMAL ADAPTATION REQUIRED



procreatech.com

INNOVATIVE HIGH-END DESIGN POWERED WITH AI NEAR VISION BEHAVIOUR CUSTOMIZATION EXTREMELY MINIMIZED ABERRATIONS

# **CREA ANIMA**

ANIMA is the revolutionary design introduced by ProCrea in the market. It is powered with AI (Artificial Intelligence) to satisfy design quality constraints and provides extreme clear vision and comfort. ANIMA is the first completely customized progressive lens, generated by a meticulous algorithm called DNA PATCH CALCULATION that re-elaborates the visual parameters by adding an innovative patch based mathematical model. Thanks to PUPYL OPENING TECHNOLOGY, ANIMA allows to support the mydriasis process ensuring natural and comfortable vision. When associated with I-check, the AI engine calculation takes into account the near interpupillary distance for inset optimization and the near vision behaviors to calculate the perfect geometry for the user, in order to have minimal adaptation needs. Moreover with MAX VOLUME technology, the wearer perceives an increase of the visual field (in depth and width) and thus an efficient increased volume.

**TECHNOLOGIES** 

TECHNOLOGY

**POWER MAP** 

### CYLINDER MAP





**DESIGN PARAMETERS** 

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**TECHNICAL SPECS** 



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

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

progressive design





### HIGH-END DESIGN FOCUSED ON WEARER'S LIFESTYLE TRULY ADAPTIVE GEOMETRY EXTREMELY MINIMIZED ABERRATIONS

# **CREA ISELF**

It is dedicated to presbyopes who need a supercustomized lens. **CREA ISELF** is the first adaptive lens that changes its geometry according to the lifestyle of the wearer, trough the choose from the following designs: **Olimpia** - design for those who need a progressive lens

both in everyday life but also during sports activities **Pilot** - – for those who loves to run outside or watch a movie on sofa, therefore it favors the the distant and

middle area **Equilibria** - balanced design, for every day and with a good zone in the far, near and in the middle area **Brico** - for those who work outside or love bricolage, favoring the near and middle area

**Close** - for those who spend many hours in the office and dedicate a lot of time reading, therefore a design that favors the area up close

**Horizon** - for those who spend many hours outside or driving, therefore it favors the distant area.

The power law and the geometry have been improved to offer excellent stability of images and wider visual field.

nks to **Pupyl Opening Technology**, **I-self** allows to support the mydriasis process ensuring natural and comfortable vision.

Its special molecule composition enables to filter the amount of light that enters in the lens.

**POWER MAP** 

### CYLINDER MAP



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**TECHNOLOGIES** 





**TECHNICAL SPECS** 



| Market Segment       | Туре     | <b>Allowed Materials</b> | Precalibration | Personalization |  |
|----------------------|----------|--------------------------|----------------|-----------------|--|
| High-end progressive | Adaptive | All                      | Yes            | Yes             |  |

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

progressive design

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HIGH-END DESIGN CLEAR VISION ON PERIPHERY BALANCED & SMOOTH DISTRIBUTION MINIMUM UNWANTED ASTIGATISM PERSONALIZATION PARAMETERS

# **CREA SINGLE**

Crea Single is the high-end PAL design provided by ProCrea.

It is calculated with WFRT<sup>®</sup> (Wavefront Ray Tracing Technology), in order to improve quality of vision on every gaze direction and drastically reduce aberrations on periphery. Every point along the corridor is optimized with variable object distance.

The smooth and balanced distribution of power across the surface gives superior comfort. Unwanted astigmastim is minimized in critical areas, like distance and near zones and the corridor, and pushed out to the parts of the lens that are, most of the times, cutted out.

Along with the rx data, all parameters provided by the user are taken into account, including back vertex distance, pantoscopic angle, frame wrap and working distance.

**POWER MAP** 

### CYLINDER MAP







### **TECHNOLOGIES**





### **TECHNICAL SPECS**



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

| Prism Ref. Point<br>(PRP)                            | Distance Ref. Point<br>(DRP) | Layout Reference<br>Point (LRP) | Inset                      | Near Ref. Point<br>(NRP) | Min. Fitting<br>Height  | Max.<br>Diameter | Sphere<br>Range  | Cylinder<br>Range | Addition<br>Range  |
|--|------------------------------|---------------------------------|----------------------------|--------------------------|-------------------------|------------------|------------------|-------------------|--------------------|
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm                       | +4 mm                           | 0 - 4 mm<br>smart<br>inset | 12 - 14 - 16<br>- 18 mm  | 14 - 16 - 18<br>- 20 mm | 80 mm            | -30 / +25<br>dpt | -8 / +8<br>dpt    | 0.75 / 4.00<br>dpt |

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HIGH-END DESIGN FOCUSED ON WEARER'S AGE IMMEDIATE ADAPTION EXTREMELY MINIMIZED ABERRATIONS

# **CREA AGE**

The new frontier of PAL designs is to improve adaptability based on users' behavior and lifestyle. The Crea Age from ProCrea Tech extends the power of Crea Single and it is based on a multi-design concept that provides different power distribution and optimization targets for each addition/corridor combination. As the addition increases with user's age, the target of the design is to keep always the same level of comfort for all zones to guarantee immediate adaptation.

Every single solution has been tested on average users with different kinds of frames and has been fixed according to the feedbacks received. Further customization is also available for this design when you provide parameters of user and frame.

| AGE [years] | ADDITION for 40 cm [D] |  |  |  |  |
|-------------|------------------------|--|--|--|--|
| 40-49       | 0.75-1.75              |  |  |  |  |
| 50-59       | 2.00-2.50              |  |  |  |  |
| > 60        | > 2.75                 |  |  |  |  |



**POWER MAP** 

### **CYLINDER MAP**







**TECHNOLOGIES** 





**TECHNICAL SPECS** 



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

|        | Prism Ref. Point<br>PRP)                             | Distance Ref. Point<br>(DRP) | Layout Reference<br>Point (LRP) | Inset                      | Near Ref. Point<br>(NRP) | Min. Fitting<br>Height | Max.<br>Diameter | Sphere<br>Range  | Cylinder<br>Range | Addition<br>Range  |
|--------|--|------------------------------|---------------------------------|----------------------------|--------------------------|------------------------|------------------|------------------|-------------------|--------------------|
| (<br>A | Geometrical<br>Center.<br>Allowed Range<br>) - 12 mm | +10 mm                       | +4 mm                           | 0 - 4 mm<br>smart<br>inset | 11 - 17 mm               | 13 - 20 mm             | 80 mm            | -30 / +25<br>dpt | -8 / +8<br>dpt    | 0.75 / 4.50<br>dpt |

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FOR SINGLE EYE VISION VERY SMALL INSET SAME PERFORMANCE AS TRADITIONAL PAL

# MONO VISION AGE

A special version of premium Age design intended for single eye vision. In the world there are many people affected by single eye vision. As those people do not converge the same way of other people on near vision, standard progressive lenses do not work. ProCrea has created a special version of its premium Age design with a new calculation algorithm featured by smaller inset values and based to the weakest ability of those people to converge. The performance is the same as the standard Age design with the optimized inset and guarantees the patient affected by single eye vision optimal performance from distance to near.

**POWER MAP** 

### CYLINDER MAP







**NOISIN** 

# 

### 

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

| Prism Ref. Point<br>(PRP)                            | Distance Ref. Point<br>(DRP) | Layout Reference<br>Point (LRP) | Inset | Near Ref. Point<br>(NRP) |            | Max.<br>Diameter | Sphere<br>Range  | Cylinder<br>Range | Addition<br>Range  |
|--|------------------------------|---------------------------------|-------|--------------------------|------------|------------------|------------------|-------------------|--------------------|
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm                       | +4 mm                           | 0     | 11 - 17 mm               | 13 - 20 mm | 80 mm            | -30 / +25<br>dpt | -8 / +8<br>dpt    | 0.75 / 4.50<br>dpt |

### **TECHNICAL SPECS**



51

# EXPAND YOUR LANDSCAPE

# 30% WIDER Near and far

# <u>CreaGiant</u>

The PAL design of ProCrea with near and far zones 30% wider.



MEDIUM TO HIGH-END DESIGN 30% WIDER DISTANCE AND NEAR ZONES MINIMUM UNWANTED ASTIGATISM IDEAL FOR PEOPLE THAT HAVE REFUSED PALS IN THE PAST

# **CREA GIANT**

Crea Giant is the innovative PAL design, developed by ProCrea, with an improved attention to distance and near zones. Compared to other conventional designs, those zones are 30% wider.

Unwanted astigmatism is reduced to the minimum and pushed to the parts of the lens that are, most of the times, cutted out. It is an hard design calculated on nominal power and is intended for people especially sensible to power variations in critical areas (Distance and Near), that have perhaps refused PALs in the past.



**POWER MAP** 

### CYLINDER MAP









TECHNOLOGIES NOMINAL POWER





DESIGN PARAMETERS $\bigcirc$  $\bigcirc$ 

| Market Segment                    | Туре | Allowed Materials | Precalibration | Personalization |
|-----------------------------------|------|-------------------|----------------|-----------------|
| Medium to<br>High-end progressive | Hard | All               | Yes            | Optional        |

| Prism Ref. Point                                     | Distance Ref. Point | Layout Reference | Inset                     | Near Ref. Point         | Min. Fitting            | Max.     | Sphere           | Cylinder       | Addition           |
|--|---------------------|------------------|---------------------------|-------------------------|-------------------------|----------|------------------|----------------|--------------------|
| (PRP)  | (DRP)               | Point (LRP)      |                           | (NRP)                   | Height                  | Diameter | Range            | Range          | Range              |
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm              | +4 mm            | 0 - 4 mm<br>auto<br>inset | 12 - 13 - 15<br>- 17 mm | 14 - 16 - 18<br>- 20 mm | 80 mm    | -30 / +25<br>dpt | -8 / +8<br>dpt | 0.75 / 4.00<br>dpt |

### **TECHNICAL SPECS**









BASIC DESIGN INTENDED FOR GENERAL USE BALANCED & SMOOTH DISTRIBUTION MINIMUM UNWANTED ASTIGATISM

# **CREA FAMILY**

This is a basic PAL Design intended for general use. The distribution of power is smooth and well balanced and guarantees good performance in any environment. Unwanted astigmatism is reduced to the minimum and pushed to the parts of the lens that are, most of the times, beveled out.

It is easy to sell for the practioner, as it completely complies with the prescription. Calculation is based on nominal power.



**POWER MAP** 

### **CYLINDER MAP**









TECHNOLOGIES NOMINAL POWER

### **DESIGN PARAMETERS**



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**TECHNICAL SPECS** 



| Market Segment    | Туре | Allowed Materials | Precalibration | Personalization |
|-------------------|------|-------------------|----------------|-----------------|
| Basic progressive | Soft | All               | Yes            | No              |

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| Prism Ref. Point                                     | Distance Ref. Point | Layout Reference | Inset                     | Near Ref. Point    | Min. Fitting       | Max.     | Sphere           | Cylinder       | Addition           |
|--|---------------------|------------------|---------------------------|--------------------|--------------------|----------|------------------|----------------|--------------------|
| (PRP)  | (DRP)               | Point (LRP)      |                           | (NRP)              | Height             | Diameter | Range            | Range          | Range              |
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm              | +4 mm            | 0 - 4 mm<br>auto<br>inset | 14 - 16 - 18<br>mm | 16 - 18 - 20<br>mm | 80 mm    | -30 / +25<br>dpt | -8 / +8<br>dpt | 0.75 / 4.00<br>dpt |

55 >>>



BASIC DESIGN SHORT CORRIDOR OPTIMIZED FOR SMALL FRAMES MINIMUM UNWANTED ASTIGMATISM

# CREA FAMILY SHORT

When you have a small frame, you need a good short corridor design and Crea Family Short is the ideal product.

It is a basic design with 12mm corridor and minimum fitting height of 14mm.

The special design concept behind it allows to keep a good performance for distance and near zones and a generous corridor width, despite its shortness. Unwanted astigmatism, as well, is reduced to the minimum. Calculation is based on nominal power.

### PERFORMANCE POWER MAP

middle

personalization

Specific

comfort

adaptation

### **CYLINDER MAP**



**TECHNOLOGIES** NOMINAL Dower 

### **DESIGN PARAMETERS**

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### **TECHNICAL SPECS**



| Market Segment    | Туре | Allowed Materials | Precalibration | Personalization |
|-------------------|------|-------------------|----------------|-----------------|
| Basic progressive | Soft | All               | Yes            | No              |

| Prism Ref. Point                                     | Distance Ref. Point | Layout Reference | Inset                     | Near Ref. Point | Min. Fitting | Max.     | Sphere           | Cylinder       | Addition           |
|--|---------------------|------------------|---------------------------|-----------------|--------------|----------|------------------|----------------|--------------------|
| (PRP)  | (DRP)               | Point (LRP)      |                           | (NRP)           | Height       | Diameter | Range            | Range          | Range              |
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm              | +4 mm            | 0 - 4 mm<br>auto<br>inset | 12 mm           | 14 mm        | 80 mm    | -30 / +25<br>dpt | -8 / +8<br>dpt | 0.75 / 3.50<br>dpt |

57 ≽



GENERAL USE DESIGN INTENDED FOR ASIAN MARKET SUITABLE FOR SHORT FRAMES

# ASIAN PROGRESSIVE

It's a new progressive design, the intended for Asian market and small frames. It is featured with a short corridor of only 12mm and minimum fitting height of 14mm. The geometry is optimized for such short corridor thus providing a good balance between usability and comfort.

# PERFORMANCE personalization > contront adaptation

### **POWER MAP**

### **CYLINDER MAP**



**TECHNOLOGIES** NOMINAL POWER



**DESIGN PARAMETERS** 

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### **TECHNICAL SPECS**



| Market Segment                       | Туре | Allowed Materials | Precalibration | Personalization |
|--------------------------------------|------|-------------------|----------------|-----------------|
| Medium to High-end asian progressive | Soft | All               | Yes            | No              |

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| Prism Ref. Po                                       | Distance Ref. Point | Layout Reference | Inset                     | Near Ref. Point | Min. Fitting | Max.     | Sphere           | Cylinder       | Addition           |
|---|---------------------|------------------|---------------------------|-----------------|--------------|----------|------------------|----------------|--------------------|
| (PRP)   | (DRP)               | Point (LRP)      |                           | (NRP)           | Height       | Diameter | Range            | Range          | Range              |
| Geometrical<br>Center.<br>Allowed Rang<br>0 - 12 mm | +10 mm              | +4 mm            | 0 - 4 mm<br>auto<br>inset | 12 mm           | 14 mm        | 80 mm    | -30 / +25<br>dpt | -8 / +8<br>dpt | 0.75 / 3.50<br>dpt |

progressive design

59 ≽



## MORE COMFORT LESS THICKNESS HIGH POWER CREA ANIMA SIZE

**ANIMA SIZE** is ANIMA, the innovative design introduced by ProCrea in the market, enhanced by the disruptive combination of CREA SIZE 2.0 and CREA LENTICULARIZATION. This design provides the four technologies of classic Anima design: AI (Artificial Intelligence) to satisfy design quality constraints and provide extreme clear vision and comfort; DNA PATCH **CALCULATION** that re-elaborates the visual parameters by adding an innovative patch based mathematical model; PUPYL OPENING TECHNOLOGY, that allows to support the mydriasis process ensuring natural and comfortable vision; MAX VOLUME (only by I-CHECK) that increases the visual field (in depth and width) perceived by the wearer. Moreover, especially for high power lenses, a combination of CREA SIZE 2.0 and CREA LENTICULARIZATION technologies is added to reduce center and edge thickness with no impact on comfort and quality of vision.



**POWER MAP** 

### CYLINDER MAP









# TECHNOLOGIES TECHNOLOGY

### **OPTIMIZATIONS**







**TECHNICAL SPECS** 



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

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



HIGH-END DESIGN LOW THICKNESS IDEAL FOR HIGH PLUS & MINUS PRESCRIPTIONS

NEW PRODUCT



Crea AT Size 360 is the exclusive Single Vision design provided by ProCrea, enhanced by the disruptive combination of CREA SIZE 2.0 and CREA LENTICULARIZATION. Based on the WFRT® Technology, it minimizes oblique errors to give clear vision on every gaze direction. Thanks to the special form of the surface, final lenses result thinner and lighter, even compared to traditional aspheric designs. Noticeable improvement will be noted by users with high prescriptions or in case of special frames, such as sport glasses, where higher base curves are needed. Personalization parameters, including user data and frame specifications, are required to achieve a compensated prescription and the maximum performance. Moreover, especially for high power lenses, a combination of CREA SIZE 2.0 and CREA LENTICULARIZATION technologies is added to reduce center and edge thickness with no impact on comfort and quality of vision.

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procreatech.com

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360

crea



**TECHNOLOGIES** 

**OPTIMIZATIONS** 

2.0

CREA LENTICULARIZATION

### **CONVENTIONAL SV**

### **CREA AT SV**







### **DESIGN PARAMETERS**







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

63 )



customized according to the person's unique eye movement patterns

### ADVANCED EVOLUTION OF A MULTI-ASPHERIC OPHTHALMIC LENS

# **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 multisphericity 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. The incredible technology of ARYA SV is enhanced by a unique and unforgettable buying experience thanks to Eye-Shuttle's virtual reality, your customers will be captured by the beauty of the Metaverse.

### **CONVENTIONAL SV**

**DESIGN PARAMETERS** 

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### **CREA ARYA SV**



PERFORMANCE



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.

### **TECHNICAL SPECS**



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

**TECHNOLOGIES** 



**ĒY**ĒSHUTTLE

**SOFTWARE** 



single vision design





OPTIMIZED FOR DIGITAL DEVICES INCREASED COMFORT ON PERIPHERAL AND NEAR VISION HIGH CONTRAST LESS STRAIN

# MULTIFORM TECH

Single vision designs available in the market work for all common daily tasks such as working and leisure. The MULTIFORM technology adds a specific focus to the intensive use of digital devices and optimizes the design for the related distances and thus for activities such as reading or playing videogames on smartphones and tablets. The innovative 3D simulation environment takes into account multiple distances at predefined gazes for which a shorter than usual distance is adopted for the optimization process on peripheral and near vision. Thanks to this innovative technology, the wearer benefits of a wider and dynamic field of view and gets increased comfort and higher contrast with less strain, in particular while using digital devices.in all directions, even at near distances.

### **CONVENTIONAL SV**

### **MULTIFORM TECH SV**







focus optimized to 2mt

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# DESIGN PARAMETERS

### **TECHNICAL SPECS**



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







### HIGH-END DESIGN OBLIQUE ERRORS MINIMIZATION IDEAL FOR HIGH PLUS & MINUS PRESCRIPTIONS

# **CREA AT 360**

Based on the WFRT® Technology, Crea AT 360 minimizes oblique errors to give clear vision on every gaze direction. Thanks to the special form of the surface, final lenses result thinner and lighter, even compared to traditional aspheric designs. Noticeable improvement will be noted by users with high prescriptions or in case of special frames, such as sport glasses, where higher base curves are needed. Personalization parameters, including user data and frame specifications, are required to achieve a compensated prescription and the maximum performance.



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

**TECHNOLOGIES** 

### **CONVENTIONAL SV**

### **CREA AT SV**







### **DESIGN PARAMETERS**



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





REPLACES ASPHERIC BLANKS IN YOUR STOCK PROVIDES CHEAPER ALTERNATIVE TO SV PERSONALIZED FF DESIGNS TO YOUR CUSTOMERS PROVIDES ATORICAL BACK SURFACE FOR TRADITIONAL PROGRESSIVE BLANKS

# CREA ASFORM (ATSC)

This is a new simple aspheric design particulary suitable to replace the conventional production based on aspheric blanks. No more aspheric blanks stock in your lab, but you can keep offering cheap aspheric lenses other than top quality multi-aspheric customized lenses (Crea AT) using the same spherical blanks. Good vision quality at a reasonable cost and the right way to consume your stock of conventionals.


| Market Segment          | Allowed Materials | Precalibration | Personalization | Prism Ref. Point (PRP)                            | Max. Diameter | Sphere Range  | Cylinder Range |
|-------------------------|-------------------|----------------|-----------------|---|---------------|---------------|----------------|
| Medium<br>single vision | All               | Yes            | No              | Geometrical Center<br>Allowed Range:<br>0 - 15 mm | 80 mm         | -30 / +25 dpt | -8 / +8 dpt    |



### THE FIRST INTELLIGENT PROCREA SV DESIGNED TO SLOW DOWN MYOPIA PROGRESSION

NEW PRODUCT

### MYOCONTROL

MYOCONTROL is PROCREA's freeform response to the myopia epidemic, which is spreading worldwide.

It is a unique and smart SV design to control myopia progression.

MYOCONTROL exploits the peripheral defocus principle, which is the most accepted theoretical model regarding myopia progression. The peripheral positive defocus is introduced with an optimised and balanced power law, and it compensates for the eyeball elongation stimulus.

MYOCONTROL features a symmetrical and concentric power distribution that homogenously stimulates the peripheral retina, where the cells that control myopia development are located. At the same time, it guarantees sharp and comfortable vision thanks to the central zone with the child's prescription.

The design has now been used across the world as myopia progression control strategy and no adaptation issues have been experienced.

MYOCONTROL THE FIRST SMART SV DESIGN

TO CONTROL MYOPIA PROGRESSION



procreatech.com

KIDS

**POWER MAP** 



### **TECHNOLOGIES**

### **DESIGN PARAMETERS**



### **TECHNICAL SPECS**



| Market Segment                              | Allowed Materials | Precalibration | Personalization |
|---|-------------------|----------------|-----------------|
| Single vision to control myopia progression | All               | Yes            | Yes             |

| Prism Ref. Point                                  | Layout Reference | Max.     | Sphere         | Cylinder       | SV Zone  | Transition Zone |
|---|------------------|----------|----------------|----------------|----------|-----------------|
| (PRP)   | Point (LRP)      | Diameter | Range          | Range          | Diameter | Radius          |
| Geometrical Center.<br>Allowed Range<br>0 - 12 mm | 0                | 80 mm    | 0 / -30<br>dpt | -8 / +8<br>dpt | 9 mm     | 17,5 mm         |

73 kids

www.procreatech.com

THE PROGRESSIVE LENS DESIGN FOR ESOTROPIA FOR CHILDREN

### **KIDS PRO**

Strabismus or Esotropia is an eye condition most commonly occurring in infants.

The condition causes a misalignment of the eyes - wherein one eye looks straight ahead and the other eye looks upward, downward, to the left or to the right.

Strabismus occurs when muscles around the eye don't work in full coordination.

Children ranging from 2 to 16 years can be treated for accommodative esotropia with Kids Pro progressive lenses.

Kids Pro is suitable for small frames. It is featured by a short corridor of only 8 mm and a minimum fitting height of 10 mm.

Kids Pro improves ocular parallelism and binocular cooperation, ensuring an excellent balance between usability and comfort.

strabismus

or esotropia

is an eye condition

most commonly

occurring in infants



a PAL design for kids affected by strabismus or esotropia with a corridor of only 8mm



SIGNS FOR YOUR LAB

**POWER MAP** 

### **CYLINDER MAP**



**TECHNOLOGIES** 

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NOMINAL POWER





kids pro

### **DESIGN PARAMETERS**



### **TECHNICAL SPECS**



| Market Segment | Туре | Allowed Materials | Precalibration | Personalization |
|----------------|------|-------------------|----------------|-----------------|
| PAL for child  | Soft | All               | Yes            | No              |

| Prism Ref. Point                                     | Distance Ref. Point | Layout Reference | Inset                     | Near Ref. Point | Min. Fitting | Max.     | Sphere           | Cylinder       | Addition           |
|--|---------------------|------------------|---------------------------|-----------------|--------------|----------|------------------|----------------|--------------------|
| (PRP)  | (DRP)               | Point (LRP)      |                           | (NRP)           | Height       | Diameter | Range            | Range          | Range              |
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm              | +4 mm            | 0 - 4 mm<br>auto<br>inset | 8 mm            | 10 mm        | 80 mm    | -30 / +25<br>dpt | -8 / +8<br>dpt | 0.75 / 3.50<br>dpt |

kids 75



POWER BOOST IN THE BOTTOM RELIEF WHILE USING DIGITAL DEVICES SUITABLE EVEN FOR YOUNG PEOPLE FULL FIELD DESIGN

### **HELP YOUNG**

Help Young is the first lens providing a very small accommodative support placed over the whole bottom part of the surface. It is suitable almost for everyone from 16 years old onwards and provides unprecedented relief while using digital devices such as smartphone and tablets. Practically, it has no corridor and does not require any adaption. Thanks to WFRT technology, the recalculated near power will be free of unwanted astigmatism and prismatic effects.

**POWER MAP** 

### **CYLINDER MAP**









TECHNOLOGIES



**TECHNICAL SPECS** 



| Market Segment        | Туре                         | Allowed Materials | Precalibration | Personalization |
|-----------------------|------------------------------|-------------------|----------------|-----------------|
| Small<br>Accomodation | Power Boost<br>Equipped Lens | All               | Yes            | Yes             |

| Prism Ref. Point                                  | Distance Ref. | Layout Reference | Power Boost | Near Ref. Point | Max.     | Sphere           | Cylinder       |
|---|---------------|------------------|-------------|-----------------|----------|------------------|----------------|
| (PRP)   | Point (DRP)   | Point (LRP)      |             | (NRP)           | Diameter | Range            | Range          |
| Geometrical Center.<br>Allowed Range<br>0 - 15 mm | Same as PRP   | + 4 mm           | -           | -               | 80 mm    | -30 / +25<br>dpt | -8 / +8<br>dpt |



EXTENDED ADDITIONS RANGE FULL FIELD DESIGN NO ACCOMODATION SUITABLE AS FIRST-PAL

### INTHELP

IntHelp is a full field progressive lens with all benefits of a single vision lens. Equipped with extended addition range: 0.40, 0.65, 0.90, 1.10, 1.30, it takes you gradually over the time to wear a standard progressive lens without the need of adaption. Each addition has been developed with a special power law that guarantees the same comfort of a single vision lens, a soft corridor and a good near vision area. It reduces your daily accommodation efforts and avoids pain, dryness and headache on lower additions, while it acts as a "early" progressive lens on higher additions. It is suited for all-day use, indoor and outdoor, including computer and mobile devices that normally require high performance on near-intermediate distances.

**POWER MAP** 

### **CYLINDER MAP**







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### TECHNOLOGIES



**TECHNICAL SPECS** 



| Market Segment           | Туре                         | Allowed Materials | Precalibration | Personalization |
|--------------------------|------------------------------|-------------------|----------------|-----------------|
| High-end<br>Anti-Fatigue | Power Boost<br>Equipped Lens | All               | Yes            | Yes             |

| Prism Ref. Point<br>(PRP)                         | Distance Ref.<br>Point (DRP) | Layout Reference<br>Point (LRP) | Inset                     | Power Boost                                | Near Ref. Point<br>(NRP) | Min. Fitting<br>Height | Max.<br>Diameter | Sphere<br>Range  | Cylinder<br>Range |
|---|------------------------------|---------------------------------|---------------------------|--|--------------------------|------------------------|------------------|------------------|-------------------|
| Geometrical Center.<br>Allowed Range<br>0 - 15 mm | + 10 mm                      | + 4 mm                          | 0 - 4 mm<br>auto<br>inset | 0.40 - 0.65 -<br>0.90 - 1.10 -<br>1.30 dpt | 18 mm                    | 20 mm                  | 80 mm            | -30 / +25<br>dpt | -8 / +8<br>dpt    |

digital family design

79



### A PAL DESIGN FOR A DIGITAL LIFE

### **INTHELP PRO**

IntHelp pro is a progressive design intended to middle age wearers who make intensive use of digital devices such as smartphones and tablets. This design reduces the strain in the near vision zone and increases the overall comfort through the use of the robust WFRT optimization technology and the Smart Inset. Moreover, the adaptation process is made easier and immediate, in particular when IntHelp design has been previously used as first PAL.

**POWER MAP** 

### CYLINDER MAP

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**TECHNICAL SPECS** 



| Market Segm    | ent    | Туре | Allowed Materials | Precalibration | Personalization |
|----------------|--------|------|-------------------|----------------|-----------------|
| PAL for digita | l life | Soft | All               | Yes            | Yes             |

| Prism Ref. Point<br>(PRP)                         | Distance Ref.<br>Point (DRP) | Layout Reference<br>Point (LRP) | Inset                     | Near Ref. Point<br>(NRP) |            | Max.<br>Diameter | Sphere<br>Range  | Cylinder<br>Range | Addition<br>Range  |
|---|------------------------------|---------------------------------|---------------------------|--------------------------|------------|------------------|------------------|-------------------|--------------------|
| Geometrical Center.<br>Allowed Range<br>0 - 15 mm | +10 mm                       | + 4 mm                          | 0 - 4 mm<br>auto<br>inset | 12 - 18 mm               | 14 - 20 mm | 80 mm            | -30 / +25<br>dpt | -8 / +8<br>dpt    | 0.75 /<br>4.50 dpt |







### AN OFFICE LENS FOR DIGITAL WORK

### INTHELP ROOM

IntHelp Room completes the range of digital devices oriented designs with an office lens that leverages all features of the Crea Room design and adds a specific optimization on intermediate and near vision zones for specific distances related to the use of smartphones and tablets. By this means, the effective volume of such zones is naturally increased and the overall comfort while working in the office is improved.







**TECHNOLOGIES** 

**DESIGN PARAMETERS** (+)  $( \mathbf{t} )$  $\square$ বিন্ 4

**TECHNICAL SPECS** 

**CYLINDER MAP** 



| Market Segment          | Туре | Allowed Materials | Precalibration | Personalization |
|-------------------------|------|-------------------|----------------|-----------------|
| Office for digital life | Soft | All               | Yes            | Yes             |

| Prism Ref. Point<br>(PRP)                            | Distance Ref.<br>Point (DRP) | Layout Reference<br>Point (LRP) | Inset                     | Near Ref.<br>Point NRP) | Min. Fitting<br>Height | Max.<br>Diameter | Sphere<br>Range     | Cylinder<br>Range | Addition<br>Range  | Degr. | Dept of<br>Field              |
|--|------------------------------|---------------------------------|---------------------------|-------------------------|------------------------|------------------|---------------------|-------------------|--------------------|-------|-------------------------------|
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm                       | +4 mm                           | 0 - 4 mm<br>auto<br>inset | 15 mm                   | 15 mm                  | 80 mm            | -25 /<br>+15<br>dpt | -8 / +8<br>dpt    | 0.75 /<br>3.50 dpt | Auto  | Variable<br>(33 cm<br>- 4 mt) |

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ANTI-FATIGUE DESIGN **POWER BOOST** IN THE BOTTOM **INTENDED FOR ASSIDUOUS** READERS FULL FIELD DESIGN

### **CREA HELP**

CREA HELP is the perfect replacement to a conventional single vision design with a specific correction in the bottom part of the lens. The use of digital devices, such as computer, tablet, smartphone but also a book, stress the eyes as muscles surrounding the crystalline make a lot of effort to adapt from one device to another resulting, after some time, in blurred vision. Crea Help reduces your daily fatigue and improves digital devices reading.



**POWER MAP** 

### **CYLINDER MAP**







**TECHNOLOGIES** 



### **DESIGN PARAMETERS**



**TECHNICAL SPECS** 



| Market Segment      | Туре                      | Allowed Materials | Precalibration | Personalization |
|---------------------|---------------------------|-------------------|----------------|-----------------|
| Medium Anti-Fatigue | Full Field<br>Progressive | All               | Yes            | Yes             |

| Prism Ref. Point<br>(PRP)                         | Distance Ref.<br>Point (DRP) | Layout Reference<br>Point (LRP) | Inset                     | Power Correction          | Near Ref. Point<br>(NRP) | Min. Fitting<br>Height | Max.<br>Diameter | Sphere<br>Range  | Cylinder<br>Range |
|---|------------------------------|---------------------------------|---------------------------|---------------------------|--------------------------|------------------------|------------------|------------------|-------------------|
| Geometrical Center.<br>Allowed Range<br>0 - 15 mm | Same as PRP                  | Same as PRP                     | 0 - 4 mm<br>auto<br>inset | 0.50 - 0.75<br>- 0,90 dpt | 18 mm                    | 20 mm                  | 80 mm            | -30 / +25<br>dpt | -8 / +8<br>dpt    |

85 anti fatigue design



OPTIMIZED THANKS TO THE OBJECTIVE MEASUREMENT OF WEARER'S EYE MOVEMENTS

### ARYA ANTIFATIGUE

ARYA ANTIFATIGUE completes the ARYA design 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 as many as 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 without any lens 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.

**POWER MAP** 

### **CYLINDER MAP**







TECHNOLOGIES

EYESHUTTLE

SOFTWARE



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DESIGN PARAMETERS $\bigcirc$  $\bigcirc$ 

| Market Segment           | Туре                         | Allowed Materials | Precalibration | Personalization |
|--------------------------|------------------------------|-------------------|----------------|-----------------|
| High-end<br>Anti-Fatigue | Power Boost<br>Equipped Lens | All               | Yes            | Yes             |

|       | 0.50 |
|-------|------|
| SPECS |      |

LRP PRP Communications of the second second

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

anti fatigue design

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OFFICE PLUS DESIGN PROVIDES EXACT DEGRESSION FOR REQUIRED DEPTH OF FIELD NEAR AND INTERMEDIATE USE



The new exclusive office lens with a completely renovated concept. Instead of degression now one can choose the maximum depth of field of the lens based on personal requirements.

A wide range of depth of fields is available: from 0,5m to 4mt, in steps of 0,5m. The design is automatically optimized for the selected value. It is easier now, even for opticians, to order an office lens at your lab. It is only necessary to know the user's work environment and create the "virtual room" accordingly.



**POWER MAP** 

### **CYLINDER MAP**









### **TECHNOLOGIES**



### **DESIGN PARAMETERS**



### **TECHNICAL SPECS**



| Market Segment                    | Туре | Allowed Materials | Precalibration | Personalization |  |
|-----------------------------------|------|-------------------|----------------|-----------------|--|
| High-end Office/<br>Computer Lens | Soft | All               | Yes            | No              |  |

| Prism Ref. Point<br>(PRP)                            | Distance Ref.<br>Point (DRP) | Layout Reference<br>Point (LRP) | Inset                     | Near Ref. Point<br>(NRP) | Min. Fitting<br>Height | Max.<br>Diameter | Sphere<br>Range     | Cylinder<br>Range | Addition<br>Range  | Degr. | Dept of<br>Field              |
|--|------------------------------|---------------------------------|---------------------------|--------------------------|------------------------|------------------|---------------------|-------------------|--------------------|-------|-------------------------------|
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm                       | +4 mm                           | 0 - 4 mm<br>auto<br>inset | 15 mm                    | 15 mm                  | 80 mm            | -25 /<br>+15<br>dpt | -8 / +8<br>dpt    | 0.75 /<br>3.50 dpt | Auto  | Variable<br>(33 cm<br>- 4 mt) |

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**crea**DESK





INTERMEDIATE AND NEAR USE

OFFICE DESIGN INTERMEDIATE AND NEAR USE VERY LOW UNWANTED ASTIGMATISM

### **CREA DESK**

DESK is an occupational design intended for intermediate and near use, such as computer or reading. It expands these specific visual fields featuring a very low unwanted astigmatism level, swim effect and lateral distortion.

It is, as well, a soft design with an almost immediate adaption.

Besides, the specific power distribution helps user to work in its natural posture, reducing also back and head movements. On placing the order, you can manually select your desired degression. A table of equivalences between degression and depth of field is provided below to ease your choice.

| ADD  |          | DEGRE  | SSION  |        |
|------|----------|--------|--------|--------|
| ADD  | -0,75    | -1,25  | -1,75  | -2.25  |
| 0,75 | Infinite |        |        |        |
| 1,00 | 4 m      |        |        |        |
| 1,25 | 2 m      |        |        |        |
| 1,50 | 1,33 m   | 4 m    |        |        |
| 1,75 |          | 2 m    |        |        |
| 2,00 |          | 1,33 m | 4 m    |        |
| 2,25 |          |        | 2 m    |        |
| 2,50 |          |        | 1,33 m | 4 m    |
| 2,75 |          |        |        | 2 m    |
| 3,00 |          |        |        | 1,33 m |
| 3,25 |          |        |        | 1 m    |
| 3,50 |          |        |        | 0,80 m |

**POWER MAP** 

### **CYLINDER MAP**







TECHNOLOGIES NOMINAL POWER

### **DESIGN PARAMETERS**



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**TECHNICAL SPECS** 



|   | Market Segment                  | Туре | Allowed Materials | Precalibration | Personalization |  |
|---|---------------------------------|------|-------------------|----------------|-----------------|--|
| _ | Medium Office/<br>Computer Lens | Soft | All               | Yes            | No              |  |

| Prism Ref. Point<br>(PRP)                            | Distance Ref.<br>Point (DRP) | Layout Reference<br>Point (LRP) | Inset                     | Near Ref. Point<br>(NRP) | Min. Fitting<br>Height | Max.<br>Diameter | Sphere<br>Range     | Cylinder<br>Range | Addition<br>Range  | Degr.              |
|--|------------------------------|---------------------------------|---------------------------|--------------------------|------------------------|------------------|---------------------|-------------------|--------------------|--------------------|
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm                       | +4 mm                           | 0 - 4 mm<br>auto<br>inset | 15 mm                    | 15 mm                  | 80 mm            | -25 /<br>+15<br>dpt | -8 / +8<br>dpt    | 0.75 / 3.50<br>dpt | 0.75 - 2.25<br>dpt |





DRIVE DESIGN WIDE & CLEAR FAR VISION GOOD INTERMEDIATE FOR DASHBOARD AND MIRRORS

### CREA COURIER

When you drive it is very important to have a wide and clear distance vision field especially to look on lateral mirrors and on the dashboard. COURIER design accomplishes this task providing a lens focused on far and intermediate vision. It is particularly suited for people who spend a lot of time driving and require a progressive lens with easy adaptation and reduced unwanted astigmatism and lateral distortion.







**POWER MAP** 

### **CYLINDER MAP**



### **TECHNOLOGIES**





| DRP<br>LRP<br>URP<br>URP<br>URP<br>URP<br>URP<br>URP<br>URP<br>URP<br>URP<br>U |  |
|--|--|
|  |  |

| Market Segment         | Туре | Allowed Materials | Precalibration | Personalization |  |
|------------------------|------|-------------------|----------------|-----------------|--|
| Driving<br>Progressive | Hard | All               | Yes            | Yes             |  |

| Prism Ref. Point<br>(PRP)                            | Distance Ref. Point<br>(DRP) | Layout Reference<br>Point (LRP) | Inset                     | Near Ref. Point<br>(NRP) | Min. Fitting<br>Height | Max.<br>Diameter | Sphere<br>Range  | Cylinder<br>Range | Addition<br>Range  |
|--|------------------------------|---------------------------------|---------------------------|--------------------------|------------------------|------------------|------------------|-------------------|--------------------|
| Geometrical<br>Center.<br>Allowed Range<br>0 - 12 mm | +10 mm                       | +4 mm                           | 0 - 4 mm<br>auto<br>inset | 18 mm                    | 20 mm                  | 80 mm            | -15 / +15<br>dpt | -8 / +8<br>dpt    | 0.75 / 4.00<br>dpt |







### **CREA ROUND FORM 24/28 CREA ULTEX FORM 40/45**



ALL MATERIALS REMOVE YOUR STOCK EXCELLENT VALUE FOR MONEY

### CREA ROUND FORM 24/28 CREA ULTEX FORM 40/45

Although the market is dominated by progressive lenses, the demand for bifocals is, especially in some countries, still present. Holding a stock of bifocal blanks in a Free Form oriented environment, only to satisfy a moderate number of requests, is very expensive for a surfacing lab. ProCrea Tech introduces CREA ROUND FORM and CREA ULTEX FORM, the first Free Form Bifocal designs in the industry. They are blended bifocals available in traditional Round 24/28mm and Ultex 40/45 segment's width styles. You can make it as any other free form lens, in any index, from a standard single vision blank. All features of other designs are supported including prism, OC decentering, inset, and thickness optimization through precalibration.

### CREA ROUND FORM 24/28

### CREA ULTEX FORM 40/45





### **TECHNOLOGIES**



### **DESIGN PARAMETERS**



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| Market Segment                  | Legacy Product                                    |
|---------------------------------|---|
| Calculation Technology          | Nominal Power                                     |
| Туре                            | Blended Bifocal                                   |
| Allowed Materials               | All   |
| Personalization                 | No  |
| Precalibration                  | Yes   |
| Prism Ref. Point (PRP)          | Geometrical Center<br>Allowed Range:<br>0 - 10 mm |
| Distance Ref. Point<br>(DRP)    | Same as PRP                                       |
| Segment Style                   | Round   |
| Segment Width                   | 24 - 28 mm  |
| Segment Vertical<br>Offset      | 5 mm  |
| Layout Reference<br>Point (LRP) | Same as PRP                                       |
| Inset                           | 2.5 mm  |
| Near Ref. Point (NRP)           | 8 mm  |
| Min. Fitting Height             | 14 mm   |
| Max. Diameter                   | 80 mm   |
| Sphere Range                    | -15 / +20 dpt                                     |
| Cylinder Range                  | -6 / +6 dpt                                       |
| Addition Range                  | 0.50 / 4.00 dpt                                   |



| Market Segment                  | Legacy Product                                    |
|---------------------------------|---|
| Calculation Technology          | Nominal Power                                     |
| Туре                            | Blended Bifocal                                   |
| Allowed Materials               | All   |
| Personalization                 | No  |
| Precalibration                  | Yes   |
| Prism Ref. Point (PRP)          | Geometrical Center<br>Allowed Range:<br>0 - 10 mm |
| Distance Ref. Point<br>(DRP)    | Same as PRP                                       |
| Segment Style                   | Round Ultex                                       |
| Segment Width                   | 40 - 45 mm  |
| Segment Vertical<br>Offset      | 5 mm  |
| Layout Reference<br>Point (LRP) | Same as PRP                                       |
| Inset                           | 2.5 mm  |
| Near Ref. Point (NRP)           | 10 mm   |
| Min. Fitting Height             | 14 mm   |
| Max. Diameter                   | 80 mm   |
| Sphere Range                    | -15 / +20 dpt                                     |
| Cylinder Range                  | -6 / +6 dpt                                       |
| Addition Range                  | 0.50 / 4.00 dpt                                   |

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## CREASIZE ZO

### our plus design your plus lens

An extra 30% decrease is guaranteed compared to traditional ellipse calculation.



### NEW IMPROVED ALGORITHM CENTER THICKNESS REDUCTION

### **CREA SIZE 2.0**

Crea Size 2.0 is a new special center thickness reduction feature designed for plus lenses that you can add to any design. When you provide a frame shape with user parameters, first, a best ellipse is determined, then, only the effective frame shape with user parameters, first, a best ellipse is determined, then, only the effective frame shape area is calculated according to the requested prescription and design. The outside area is calculated as a blending zone with increasing curves in order to achieve the minimum center thickness. The traditional elliptical shape let you safely apply hard and A/R coatings. The final glazing at the edger removes the unnecessary part of the ellipse and gives you the final lens for fitting with the best possible thickness. An extra 30% decrease is guaranteed compared to traditional ellipse calculation.



Top View



CREA FF LDS

CREA FF LDS
LENS DESIGNS
LENS DESIGNS
Support
Support
Example 1
LINS
DUTPUT
Lens surface
and lens data



# LUS VALUE CREA LENTICULARIZATION

### procreatech.com EDGE AND CENTER THICKNESS REDUCTION CREA LENTICULARIZATION

The final weight and thickness (center and edge) of a lens is very important. ProCrea Tech has designed an innovative, supported on all designs, algorithm lenticularization to reduce thickness for a minus and plus lens. Given an optical area where the power is stable and the optical performance is maximum, a soft gradual change of curvature occurs from the edge of that area to the periphery, reducing the final thickness.

NEW IMPROVED ALGORITHM

The shape of the optical area can be circular or based on the frame shape. Any diameter can be selected for the optical area even if there are some available by default.

# crea enticularization



### CREA LENTICULARIZATION, EXTREME EXPERIENCE!



ASFORM SOFT MEDIUM HARD

| - 20,00 Ø70       | 1.74                  |      |
|-------------------|-----------------------|------|
| CENTRAL THICKNESS | <b>EDGE THICKNESS</b> | BOOL |
| 1,5mm             | 15,4mm                |      |
| 1,5mm             | 6,6mm                 | 40mm |
| 1,5mm             | 4mm                   | 40mm |
| 1,5mm             | 2mm                   | 40mm |



plus value 101 ≽







### ARYA · CREA ANIMA · CREA ANIMA SIZE CREA ISELF · CREA AGE · CREA SINGLE







### **CREA FAMILY**






#### 

### **CREA ASIAN**





# $\label{eq:multiform} \begin{array}{l} \text{MULTIFORM TECH} \cdot \text{CREA AT SIZE} \\ \text{CREA AT} \cdot \text{CREA ASFORM} \cdot \text{ARYA SV} \end{array}$



# **MYOCONTROL**



### **KIDS PRO**



**KIDS DESIGN** 

### $\textbf{INTHELP} \cdot \textbf{CREA ARYA ANTIFATIGUE}$



### **HELP YOUNG**







### **INTHELP ROOM**







### **CREA ROOM · CREA DESK**





# **CREA ROUND FORM 24/28**



## **CREA ULTEX FORM 40/45**



fixed inset (2,5mm)

fixed inset (2,5mm)











#### **HEADQUARTERS**

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