# Shamir Autograph Intelligence™

Designed to match your Visual Age<sup>™</sup>



**SHAMIR** 

## Todays Progressive

Provides patients a "personalized" lens, based on measurements of their selected frame, or customized based on lifestyle information from questionnaires.

The design concept is the same for everyone, and provides everyone with the same solution.

## DOES ONE DESIGN SATISFY EVERYONE'S NEEDS?





## Today's Progressive Design

### There are 3 basic concepts used. Emerging, Established, and Advanced.



### STANDARD (T-SHAPED) PROGRESSIVE

2.00 ADD PROGRESSIVE

### 3.00 ADD PROGRESSIVE



#### SHAMIR AUTOGRAPH INTELLIGENCE<sup>™</sup>

# CAN LENS DESIGNS BE MORE INTELLIGENT?



## **Big Data Analysis**

#### INCLUDING OVER 5 MILLION RX ORDERS

There are relatively few Rx progressive lens orders with additions that are either very low, or very high.

To understand this distribution, we decided to take a closer look at visual behavior and preferences of presbyopes of all ages, by taking into account their **Visual Age**<sup>™</sup>.

**Visual Age**<sup>™</sup> refers to the physiological age of the eye (the required addition) and is generally correlated with the patient's chronological age.

#### GLOSSARY

## **Big Data**

RX DISTRIBUTION BY ADDITION





0.34% 3.50

## Big Data -Evaluating Visual Needs per age and daily activities

CONSUMER RESEARCH - BASED ON 1,300 PEOPLE CONSUMER INTERVIEWS-OF 130 PEOPLE





CONSUMER RESEARCH - BASED ON 1,300 PEOPLE CONSUMER INTERVIEWS-OF 130 PEOPLE

The importance of the near/reading zone *increases* as presbyopes age; with those in their **60's and up placing a higher preference** on this zone.



## Near Distance

AVERAGE HOURS A WEEK







CONSUMER RESEARCH - BASED ON 1,300 PEOPLE CONSUMER INTERVIEWS-OF 130 PEOPLE

The importance of the digital zone as prebyopes age, is verified by evidence that **young presbyopes use their smartphones for many more hours** throughout the day than do older presbyopes.







RESULTS DERIVED FROM: AI CONSUMER RESEARCH SURVEY.





1.53

CONSUMER RESEARCH - BASED ON 1,300 PEOPLE CONSUMER INTERVIEWS-OF 130 PEOPLE

The intermediate vision zone holds greater importance for young to middle age presbyopes, while use of this zone decreases with advancing age.



## Intermediate

AVERAGE HOURS A DAY







CONSUMER RESEARCH - BASED ON 1,300 PEOPLE CONSUMER INTERVIEWS-OF 130 PEOPLE

The frequency of switching from one vision zone to another was found to be **higher among young presbyopes**, due to their heavier use of digital devices.



## Switch Distances Frequency

MORE THAN 5 TIMES/HOUR







CONSUMER RESEARCH - BASED ON 1,300 PEOPLE CONSUMER INTERVIEWS-OF 130 PEOPLE

Presbyopes of all ages tend to spend, on average, the same number of hours per week outdoors, with this number increasing slightly with age.













SHAMIR AUTOGRAPH INTELLIGENCE™

## Is there a correlation between Visual Age<sup>™</sup> and visual needs?





## Today's Presbyopic Consumer Needs











CONSUMER RESEARCH - BASED ON 1,300 PEOPLE CONSUMER INTERVIEWS-OF 130 PEOPLE

Visual needs are a function of **Visual Age**<sup>™</sup>.







Importance of far vision is almost equal for all ages, slightly increasing with age.



The frequency of switching from one vision zone to another is found to be higher among young presbyopes.



Importance of intermediate vision decreases slightly as patients age.



Importance of digital reading significantly decreases as patients age.



Importance of near vision increases significantly with advancing age.



CONSUMER RESEARCH - BASED ON 1,300 PEOPLE **CONSUMER INTERVIEWS-**OF 130 PEOPLE







Importance of far vision is almost equal for all ages, slightly increasing with age.











CONSUMER RESEARCH - BASED ON 1,300 PEOPLE **CONSUMER INTERVIEWS-**OF 130 PEOPLE









The frequency of switching from one vision zone to another is found to be higher among young presbyopes.









CONSUMER RESEARCH - BASED ON 1,300 PEOPLE **CONSUMER INTERVIEWS-**OF 130 PEOPLE











Importance of intermediate vision decreases slightly as patients age.







CONSUMER RESEARCH - BASED ON 1,300 PEOPLE **CONSUMER INTERVIEWS-**OF 130 PEOPLE













Importance of digital reading significantly decreases as patients age.





CONSUMER RESEARCH - BASED ON 1,300 PEOPLE **CONSUMER INTERVIEWS-**OF 130 PEOPLE















Importance of near vision increases significantly with advancing age.



CONSUMER RESEARCH - BASED ON 1,300 PEOPLE **CONSUMER INTERVIEWS-**OF 130 PEOPLE

Visual needs are a function of **Visual Age**<sup>™</sup>.



Visual Age<sup>™</sup> (addition)







Importance of digital reading significantly decreases as patients age.



Importance of near vision increases significantly with advancing age.



... AND ADDED SOME NEW ONES

**NEW** UPGRADED TECHNOLOGY INCORPORATING ARTIFICIAL INTELLIGENCE



Eye-Point Technology AI<sup>™</sup>



• Until now, Eye-Point Technology III<sup>®</sup> used simulations of the human eye and real-world images.

 Using a new software, Head Eye Integrative Movement (HEIM), we tracked exactly through which areas in the lens patients actually look, along both the vertical and horizontal meridians in the different vision zones.

• This technology now enables us to **design a lens that takes into account actual** viewing angles computed for every distance.

• Previously, our designs were based on simulated eye movement. Now we actually know where the eye looks.

Whereas in the past we simulated, today we can see!



## Current progressive lens design concept: The Gap

Current lens design provides the same solution for all patients, with "personalization" referring only to the measurements of the chosen frame.



#### EXAMPLE OF CURRENT PROGRESSIVE





## Today's Presbyopic Consumer: The Gap

There is a Gap between what the consumer **NEEDS** and what they GET from today's progressive lenses.





## Today's Presbyopic Consumer: The Gap

There is a Gap between what the consumer **NEEDS** and what they GET from a lens designed for Digital Devices.





#### SHAMIR AUTOGRAPH INTELLIGENCE<sup>™</sup>

# HOW WILL SHAMIR AUTOGRAPH INTELLIGENCE<sup>™</sup> DO IT DIFFERENTLY?





• The end result is a product ahead of its time, designed with extreme accuracy





PATENT PENDING



A NEW KIND OF DESIGN: BUILT WITH

## Shamir Proven Technologies

Ergonomic design for postural comfort

Adjusts the reading zone inset of the lens to each individual patient's convergence during near viewing



Natural Posture<sup>™</sup>



#### As-Worn Quadro<sup>®</sup>

Four times greater design stability to frame tilt variations, in any chosen frame







### Intellicorridor<sup>™</sup>

Unique power profile for clearer intermediate vision



## TECHNOLOGIES WORKING TOGETHER



### Eye-Point Technology Al <sup>™</sup>

Based on our HEIM findings, softness of design and the use of the zones within the corridor change as Visual Age<sup>™</sup> changes.



#### Continuous Design Technology<sup>™</sup>

The power profile for each design is adjusted to fit the visual needs of the wearer at the specified Add power.

### IntelliCorridor<sup>™</sup>

IntelliCorridor<sup>™</sup> technology is the ability to fit the corridor shape to every design concept. In the past the same corridor shape was applied along each product:

-----% of Add 1.00 -----% of Add 2.00

**—**% of Add 3.00

The proven technology is applied again, now in **Autograph Intelligence**<sup>™</sup>, providing unique addition progression to every **Visual Age**<sup>™</sup>, based on it's visual needs.







# **NATURAL POSTURE™**

**Comfort Technology** 

Most people read while holding the book at a distance of 40cm, with a viewing angle (from eye to lens) of 30°.

If the viewing zone of the lens is not positioned to this angle, patients compensate by raising or lowering either their head or the book, leading to discomfort due to the unnatural posture.









# NATURAL POSTURE<sup>TM</sup>

**Comfort Technology** 

The head tilt created by these image shifts cause discomfort and unnatural posture.

## **PLUS lens (Hyperope patient)**

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**Farsighted** The image shift is down. To compensate we hold objects higher or lower our chins.

# **MINUS lens (Myope patient)**

**Nearsighted** The image shift is up. To compensate we hold objects lower or raise our chins.









# NATURAL POSTURE<sup>TM</sup>

**Comfort Technology** 

Natural Posture Technology shifts the image back to an ergonomically correct viewing angle of 30°.

Dynamic positioning of full reading allows the object to be seen at a more comfortable, natural position for the patient.











# **AS-WORN QUADRO**<sup>™</sup>

### Perfect vision for any frame choice



(Compensates the Rx)

Traditional Progressives were designed for specific tilts and wraps to fit your everyday frame. Today's lifestyles demand that frames come in various tilts and wraps, which causes a lack of clear vision.









# **AS-WORN QUADRO**<sup>™</sup>

### Perfect vision for any frame choice



#### As-Worn Quadro<sup>™</sup>

(Compensates the Rx and Design)



As worn compensates the Rx, As-Worn Quadro<sup>™</sup> compensates the Rx and design to provide clearer vision in every frame.





# **AS-WORN QUADRO**<sup>™</sup>

### Perfect vision for any frame choice



#### As-Worn Quadro<sup>™</sup>

(Compensates the Rx and Design)



**Patient Benefits** 





# Close-Up by Shamir



### **The Norm**

Traditionally progressive lenses required a predetermined inset (the difference between the distance monocular pd and the near monocular pd) because the design was molded on the front of the lens. This predetermined inset varied by lens design but usually was somewhere between 1.8 and 2.2 mm.



# Close-Up by Shamir



#### The Issues

With traditional progressives that use a predetermined inset patients with convergence issues, both insufficiency and excess, will have a smaller viewing zone at near and intermediate. Without a properly aligned near and intermediate zone the patient may experience excessive distortion, ghost images, asthenopia (eyestrain) or even headache.



# Close-Up by Shamir



#### **The Solution**

Full backside Freeform lenses with Close-Up technology from Shamir now gives you the ability to customize the inset from 0 to 5mm. This allows your patient to stay centered in the design from distance through the corridor and into the near. This results in a more accurate personalized lens and a more comfortable viewing experience for your patient.



#### SHAMIR AUTOGRAPH INTELLIGENCE™

Questions?





#### SHAMIR AUTOGRAPH INTELLIGENCE™

Thank You



