atLast *Enhanced Multifocal*

Processing Guidelines – Composite 59
(updated: June 29, 2009)

Material

- Composite 59 Polycarbonate
- Abbe 30
- 100% UV-A and UV-B Absorption
- n_d=1.586
- Specific Gravity 1.20 $^{g}/_{ccm}$

Processing Tips

1. The front component of atLast! Composite 59 lenses is a Trivex® (1.53 index) including a power gradient which is comprised of a non-rotationally symmetric aspheric design. The back component is a 1.59 index polycarbonate containing a 26mm round segment.
2. The atLast! Composite 59 lens should always be generated as a polycarbonate product. The use of surface saver tape is necessary. Please wait 30 minutes after surface blocking with alloy before generating. Wax blocking, because of support and stabilization concerns, is not as preferable as alloy but can be used and should be cooled at least 20 minutes before generating.
3. When generating, a wet process is preferred, with a coolant temperature of 50°F. If a dry generating process is required, a polycarbonate setting (slow macro) is recommended.
4. The front component of the atLast! Composite 59 lens is approximately 1.3mm thick and PixelOptics recommends that the minimum thickness be set at 1.8mm. On grooved and rimless mountings, PixelOptics recommends a target thickness of 2.8mm.
5. In order to best stabilize the material, fining and polishing of atLast! Composite 59 lenses should conform to polycarbonate standards with the temperatures of the fluids from 45° to 50°F.
6. In order to avoid any interference presented by the top of the segment the power should be verified 8mm to 10mm above the segment apex or 6mm to 8mm above the prism reference point (PRP).
7. The prism should be verified at the prism reference point (PRP) which is 2mm above the apex of the embedded segment line and halfway between the lens's engravings.
8. When edging atLast! Composite 59 lenses, it is recommended that the edger be set on a "Trivex" setting if the edger provides this setting. Otherwise, edge Composite 59 as a polycarbonate lens.
9. When grooving an atLast! Composite 59 lens, PixelOptics suggests a groove position no closer to the front of the lens than 1.3mm. The groove depth setting should be .3mm deep with a width of .6mm. It is recommended that the groove position be optimized to avoid any noticeable change in appearance of the groove channel.
10. When drilling the atLast! Composite 59 lenses the drill bit must be sharp and care must be taken to not 'punch' through the back layer. Chamfering both sides of each drill hole is recommended.
11. Safety beveling the front and back side of the atLast! Composite 59 lenses is recommended.
12. atLast! Composite 59 lenses are manufactured with a non-tintable, scratch resistant hard coating. In order to tint the atLast! Composite 59 lenses a tintable back side spin coating must be applied. Tints mixed with deionized water and heated to 200°F are recommended.

PixelOptics™

Power and Prism Verification Notes:

1. With a manual or automatic lensometer, distance power of the atLast! Composite lenses should be verified at a distance 6mm to 8mm above the prism reference point (PRP).
2. The near power of the atLast! Composite lenses should be measured at segment center.
3. The prism of the lens should be checked at the prism reference point (PRP).

Hard Coating

atLast! Composite 59 semi-finished lens blanks feature a front-surface, factory-applied scratch resistant, hard coating. This hard coating is non-tintable. If an atLast! Composite 59 lens is to be tinted, a tintable back side spin coating must be applied.