Rose K2 Improves Performance for your Keratoconus Patient

Aspheric aberration control design improves performance for the world’s most prescribed keratoconus lens.

Over the last 15 years, major developments in computer lathing technology allow fitters to order lenses manufactured in nearly any shape they can imagine. These advances have lead to innovative designs, and one of these is the Rose K2 lens with aberration control optics.

Design Goals

The design goal of the Rose K2 is to bring all focal points onto the retina at a single point, regardless of base curve radii or lens power. This is accomplished by incorporating a specific eccentricity value within the posterior optic zone, as well as stretching the optic zone without changing the fit, to create the desired results in improved vision and comfort (Illustrations 1 and 2). The posterior surface has an aspheric base curve incorporated into the lens design and anterior curves are manufactured relative to the posterior curves directly outside the BOZ, which effectively increases the effective optic zone of the lens. The overall benefit improves vision performance, particularly at night but also during daylight hours.

Results

The Rose K2 aspheric design has shown improvements in visual performance and comfort. So what are the results? Independent studies at Blanchard Contact Lens, as well as increasing acceptance of the design, consistently illustrate improvements in overall visual acuity improvement and comfort for a majority of patients. Studies have shown overall visual acuity improvement in 84% of patients as well as a 68% improvement in comfort, acuity improvements of 72% by one line or more, and 28% with the same or less than one line improvement in acuity.

Simplified Fitting

Rose K2 lenses are fitted in the same fashion as the original Rose K lens. Use of diagnostic fitting lenses defines correct base curve selection; edge lift values, singularly the most important aspect of fitting any keratoconus lens; as well as diameter and lens power. The basic Rose K diagnostic lens is utilized to validate the lens fit and at the time of ordering, Rose K2 Aberration Control lenses are requested. Design software is utilized within the lathing module to convert spherical Rose K diagnostic lens parameters used in fitting the patient into the advanced, aspheric aberration control Rose K2 parameters. During initial design and testing it was found that 95% of patients preferred the new Rose K2 lens over their existing Rose K lenses, confirming and validating the parameter conversion to the Rose K2 Aberration Control design. Since its conception and market launch, the Rose K2 design platform has been incorporated into all new Rose K lens products. Now, Rose K2 IC lenses for corneal ectasias, post LASIK, pellucid marginal degeneration, and large oval or keratoglobus corneas; as well as Rose K2 Post Graft lenses benefit from the advanced optics. Lenses can be designed and ordered using a new order form or the interactive step-by-step design program housed on the Blanchard Contact Lens web site at BlanchardLab.com. All orders placed on the web site also create an entry into the Rose K2 sweepstakes through December 14, 2010.

Your keratoconus patients deserve the highest quality of vision that you can provide. Rose K2 Aberration Control optics improve the overall quality of vision performance, wearing comfort, and contrast, and the larger optical zone diameter reduces the incidence of halos, glare and flare in dim illumination. Contact a Blanchard Contact Lens consultant today to upgrade your patients and your practice to advanced Rose K2 Aberration Control optics.

Illustration 1. Lens design induces spherical aberrations causing light rays to strike the retina in multiple focal points.

Illustration 2. Changing the curves of the lens surface enables light rays to converge to a single point.

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Blanchard Contact Lens, Inc. was founded in Manchester, NH, and has provided the GP lens industry with leading lens designs and expert consultation since 1986. For additional information about Rose K2 lenses and Blanchard Contact Lens, Inc., call 800-367-4009 or visit blanchardlab.com.