The ALK™ is a technologically advanced rigid gas permeable (RGP) contact lens design and fitting system for keratoconus.

The ALK™ was developed with Dr Alex Levit, the design utilizes the technological advancements of manufacturing processes by the latest submicron accurate CNC lathes, which generate complex lens curves with exact and seamless changes in form and shape of the lens surface. As a result, unlike other lens designs, the ALK™ lenses do not require the manual polishing of sharp ridges generated due to the difference between the central and peripheral curves. The single cut technology generates complex spline surfaces which enable the contact lens specialist not only to fit healthier, more comfortable lenses but also, when required to customize any lens parameters and achieve an optimal fitting relationship with irregular corneae.

Due to sagittal height-based design, ALK™ feature a larger BCOD and TD than other conventional lenses for corneal ectasiae, which facilitates better optical quality and therefore enhanced resulting visual acuity, especially in mesopic and scotopic conditions.

The ALK™ lens design is based on a model of corneal changes which occur during keratoconus disease progression. This is a different fitting approach to the customary standardized utilization of progressively steeper and smaller optic zones radii and diameters respectively.

The ALK™ 23-25 lens trial set is designed to adequately fit 80% of keratoconic eyes and if required modifications may be applied not only to zone SAGs, diameters and edge profiles (ski angles), but also may be manufactured back, front and bi-toric designs, with spherical aberration control, single vision and multifocal optics.

ALK™ Standard Fitting set parameters

9-11 Standard lenses
4 lenses with a **large TD**
4 lenses with a **small TD**
5 lenses with an **increased edge lift** for corneae with higher eccentricities

BOZR 5.06mm – 8.00mm
BOZD 6.00mm – 8.40mm
TD 8.50mm –11.40mm

All parameters are amenable to adjustments and modification during the fitting customization process.

Future developments

Fitting from topography software
Quadrant specific adjustments for highly asymmetric corneae.