Diamond tools for Contact Lenses and IOL’s

Contour Fine Tooling has developed a complete range of tools to meet the requirements of today’s contact lens and IOL manufacturers. For optimum cutting efficiency the correct tool geometry and diamond material must be used for any given material. Available with either natural or synthetic single crystal diamond, a range of radius size and rake angle is offered. Tools can either be solid shank or insert style. Contour orients the diamond to maximise the wear resistant characteristics.

**FEATURES**
- Edge waviness certificate of conformance
- Chip free at 500x Nomarski
- Guaranteed quality
- Optimum tool life
- Flawless diamond

**OPTIONS**
- Natural or synthetic single crystal diamond
- Various geometries
- Solid shank/insert system

**POSSIBILITIES**
- Diffractive tools
- Milling tools
- Half-radius tools
- Custom shanks
- and many more!
For the direct lathing and finishing of contact lenses and IOL's, Contour has developed a range of tools with controlled waviness. These tools mostly have a conical clearance and are available with natural or synthetic single crystal diamond, or the traditional solid shank or the insert system.

Compared to conventional tungsten carbide or steel milling cutters, Single Crystal Milling Tools for IOL's offer the following:

• Much longer tool life (10,000 – 15,000 IOL lenses)
• Dramatic reduction of machine downtime (at least 150 times less) in replacing conventional cutters
• Higher accuracy
• Superior surface finish, less polishing

Contour IOL diamond milling tools can be used on PMMA and foldable materials, fixed with wax, vacuum or ice.

Contour has refined the insert to the point that it is now in widespread use by contact lens and IOL manufacturers around the world. The insert can be fitted to any holder of our existing design to suit its intended application. Tool holders are made by Contour in standard and customised offsets.

With the high production demands for toric designs and the need to remain cost competitive new technologies are being employed using high speed tool actuators. Contour has met this challenge with light weight Titanium tool holders required to keep the total mass to the absolute minimum.

These tools are being used for bulk removal of material prior to finishing for two axis applications. The tools mostly have a cylindrical clearance and are made to the same high quality standards as all Contour tools. These tools can be used for single axis finishing applications.

Non-controlled waviness tools

Controlled waviness tools

Insert system

Fast Tool Servo

Milling tools