TECHNICAL TIP

POLYCARBONATE LENS DRILLING FOR RIMLESS MOUNTS

❑ EDGING:

- Edge lens to desired shape and size.
- Safety bevel both sides of lens after rimless edging procedures.
- Edge polishing and tinting should be done prior to drilling.
- Drill lenses prior to anti-reflection coating.

❑ MANUAL LAYOUT:

- Mark horizontal axis/ 180-degree line on each lens with a water-soluble pen; duplicate pattern axis line if no prescription axis is applicable.
- With a felt-tip pen, carefully place a dot at each drilling location on the lens front and verify correct positioning.
- Location should be double- checked for accuracy to +/-0.5mm.

❑ DRILLING:

- Polycarbonate cuts best with a sharp burr operated at low speed and minimal to moderate pressure. Twist style drills, cutting less aggressively, often leave subsurface damage.
- Place lens with front towards drill bit and slowly operate drill through lens; back drill bit out of hole often to remove cutting debris that will increase heat damage.
- Be sure to chamfer around the hole when finished drilling. (Much like safety beveling after edging)
- Note that excessive pressures and speed create damaging heat, which may create eventual fractures.
- An extra precautionary step to avoid fractures would be to place a drop of OMS Drillseal into the hole. Distribute the Drillseal evenly with a toothpick. This will seal the hole and it dries instantly. *Please note the dropper may gel if left in the bottle.*

❑ CLEAN-UP:

- Cleaning should be done prior to mounting with warm soapy water with a clean water rinse.
- Wiping should be minimized to avoid abrasion from cutting debris.

❑ MOUNTING:

- Assemble lenses with appropriate hardware, minimizing excess tension.
- Frames should be fully aligned and formed to lens prior to final assembly.
- Excess stress on assembled eyewear may eventually create fractures. Use of plastic bushings is recommended.

❑ INSPECTION:

- Mounted lenses should be inspected for excess stress, correct positioning, and alignment.