

## Releasing a Lens Grinding Fixture Bond

**Objective** A fixture used in lens grinding uses a metallic bond to secure the glass form to the fixture during grinding. Induction is used to release the lens from the bonding material

**Material** bonded grinding fixtures; Teflon-coated helical coil

**Temperature** 55°C (130°F)

**Frequency** 355 kHz

**Equipment** Ambrell 5kW induction heating system including:

- **Coil:** custom-designed helical coil
- **Workhead:** two 1.5 $\mu$ F capacitors (Total 0.75 $\mu$ F)

**Process** The bonded assembly is placed (glass up) within a helical coil which circles the bonding slug. Induction heats the material to the melting point in 5-7 seconds. Upon melting, the lens is released from the fixture, the fixture drops away.

**Results/Benefits** **Efficiency:** the bond is released cleanly, in a very few seconds  
**Economy:** energy is applied only where required

