

New HRDT Technology Cuts Development Costs for High Refraction Polymer Optics

PAVILION, NY – (SEND2PRESS NEWSWIRE) – Syntec Technologies, a leading manufacturer of custom polymer optics, announces patent-pending HRDT(tm) technology that cuts costs by up to 5X for optics applications requiring high refraction, heat resistant, NIR performance. HRDT, or high refraction diamond turning, enables direct diamond turning of polymers such as Ultem(tm) to a surface as smooth as 60 angstroms, critical in meeting many telecom, defense and biometric performance demands.

According to Rick Arndt, VP of Tooling for Rochester Tool and Mold, a wholly owned subsidiary of Syntec Technologies, "Before HRDT was available, it was impossible to direct diamond turn polymers suitable for high index NIR needs any smoother than 450 angstroms. Each prototype cycle needed a mold, which required 8 to 12 weeks minimum and also raised production break-even points. Now these high performance, thermal resistant prototypes can be created in days at volumes as low or high as needed."

Paul Tolley, VP and General Manager of Syntec adds, "HRDT is one more advance in an evolving series that have made polymer optics, once rare, a significant force in solving high technology issues. Polymer optics has three unique advantages: 1) light weight, which is critical for airborne accuracy and human mobility; 2) custom shapes, which are critical for easy integration into demanding packaging constraints; and 3) complex structures, which are critical in reducing overall size and cost." He adds, "HRDT is the result of our ongoing commitment to innovative ways for using existing materials more and more cost-effectively."

Available for immediate use, Syntec's HRDT technology supports the following:

- * Multiple shapes including spherical, aspherical, toroidal, cylindrical, cone and plano*
- * Lens surfaces with multiple diffractive elements*
- * Polyetherimide and polyethersulfone thermoplastic resins, reliably delivering surfaces as smooth as 60 angstroms*

About Syntec Technologies

Located in the greater Rochester, NY area, Syntec Technologies delivers

custom polymer optics solutions, complete from innovative designs for manufacturability through proprietary RAMP technology (Rapid Assembly and Manufacturing Processes) to full supply chain management.

For more information visit www.syntectechnologies.com.

HRDT is a trademark of Syntec Technologies; Ultem is a trademark of General Electric Company.

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