μ-LAM

Cutting Edge Precision
Laser Focused

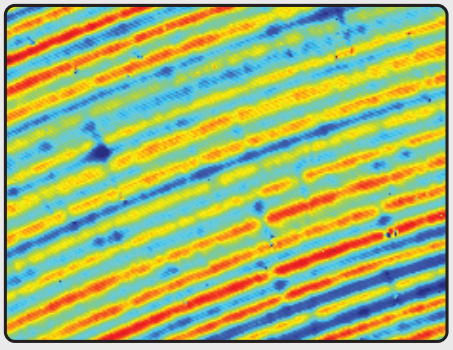
Laser Assisted Machining of Infrared Materials

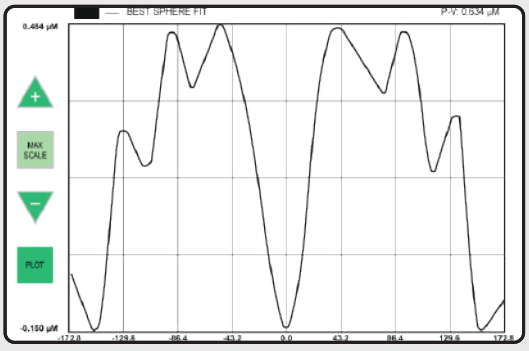
- Silicon
- Zinc Selenide
- Zinc Sulfide
- Calcium Fluoride
- Germanium

Diameter | Concave | Convex | Finish | Form PV | Passes/Tool | Time/Pass | Radius

Silicon Large Mirror

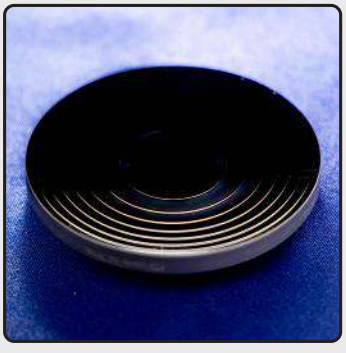
Ø350mm | 790mm | 3-5nm | 0.60 µm | 3 Passes | 30 Min | 500 µm

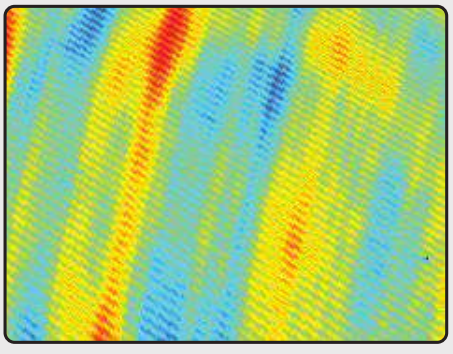


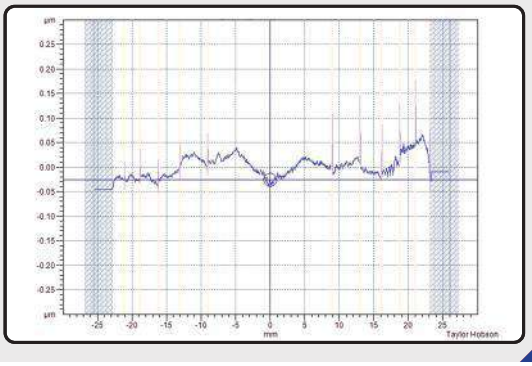


Silicon Diffractive Lens

Ø50mm | 150mm | 1-3nm | 0.15 µm | 12 Passes | 6 Min | 150 µm | Diffractive

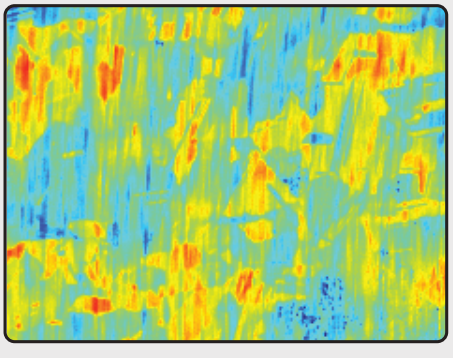


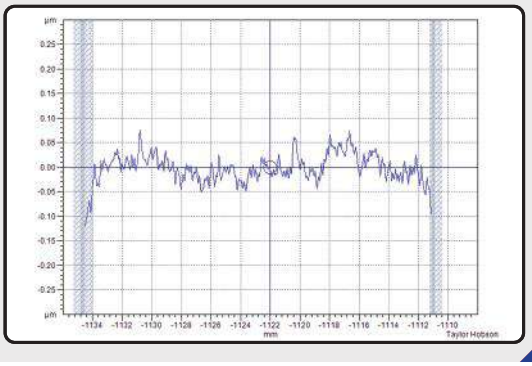




Zinc Selenide Plano Lens

Ø25mm | Plano | 1-3nm | 0.15 µm | 20 Passes | 8 Min | 500 µm

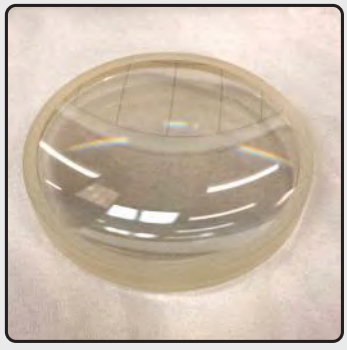
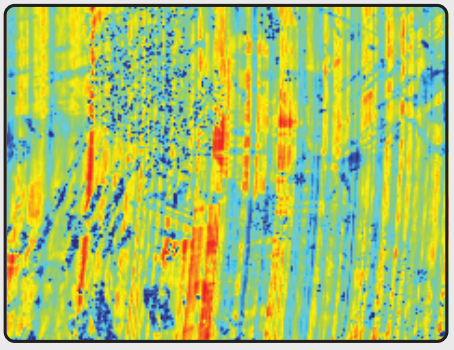
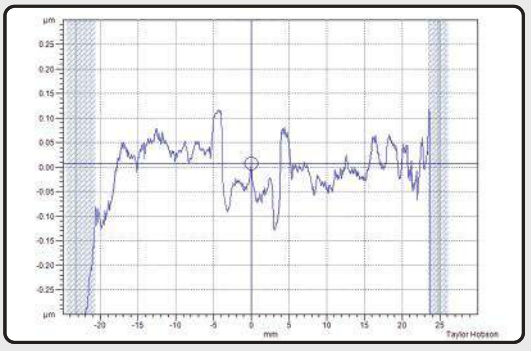




Diameter | Concave | Convex | Finish | Form PV | Passes/Tool | Time/Pass | Radius

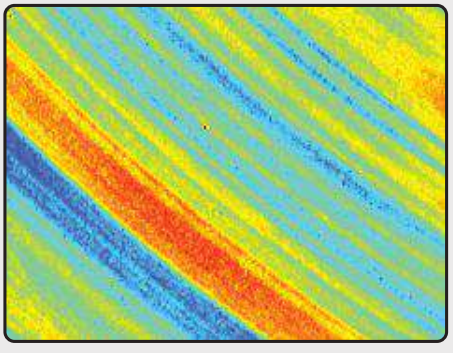
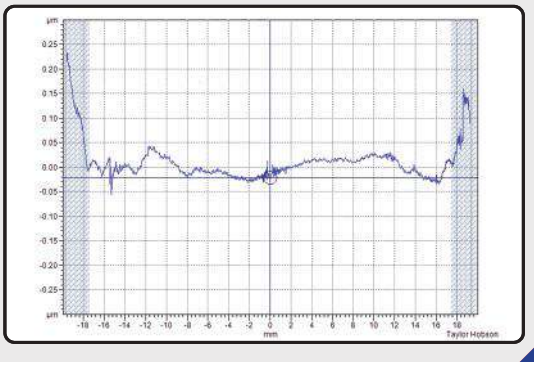
Zinc Sulfide Meniscus Lens

Ø60mm	45mm	1-2nm	0.20 µm	8 Passes	8 min	300 µm	Diffractive

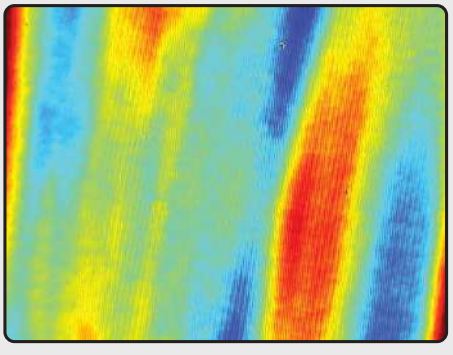
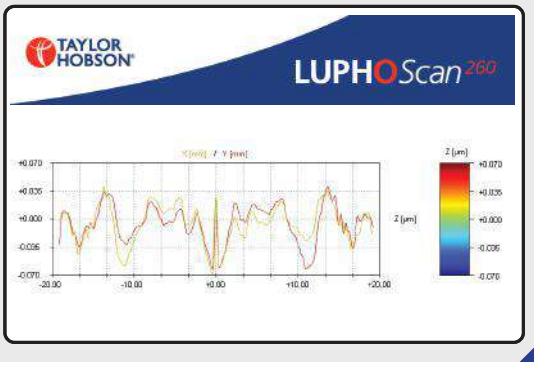
Calcium Fluoride Meniscus Lens

Ø35mm	35mm	1-2nm	0.15 µm	15 Passes	2 Min	300 µm

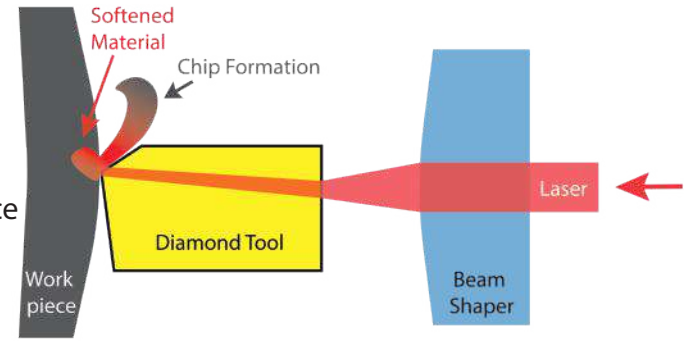
Germanium

Ø35mm	200mm	<1nm	0.110 µm	>1X Passes	2 min	1 mm

The Patented Solution

- Issued patent with over twenty claims
- Innovative solution proven through extensive research & development
- Laser delivered precisely at tool-workpiece interface
- The laser passes through an optically transparent diamond tool



Comparison of Conventional vs Micro-LAM

Silicon Conventional

Silicon with Micro-LAM

Zinc Sulfide Conventional

Zinc Sulfide with Micro-LAM

Calcium Fluoride Conventional

Calcium Fluoride with Micro-LAM