

Nanotech 650FG^{v2} Objective

To characterize grinding of large diameter SF6 Glass lenses in terms of both surface finish and form accuracy

Process

XZ Cross-Axis Grinding

Optional Accessory Item

Motorized CNC Dresser with LVDT Probe

Application Summary

Part Configuration

Material: SF6 Glass

Diameter: 75 mm

Radius: 250 mm

Surface Type: Concave Sphere

Tool Configuration

Wheel: Resin Bonded Diamond

Diamond Type: Natural

Grit: 8 μm

Wheel Diameter: 75 mm

Machining Parameters

Work Spindle RPM: 145

Grind Spindle RPM: 6,700

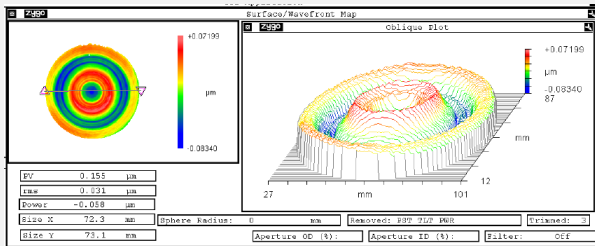
Finish Depth of Cut: 1 μm

Finish Feedrate: 15 mm/min

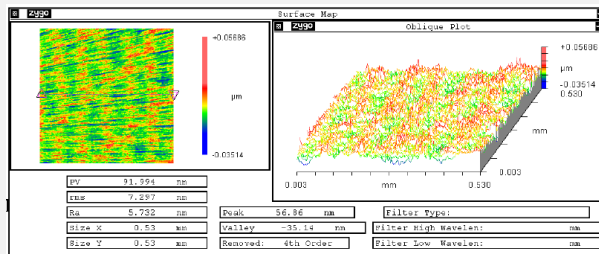
Coolant: Challenge 300 Flood



Metrology Results



Form Accuracy: PV = 0.155 μm



Surface Finish: Ra = 5.732nm

