

## Nanotech 650FG<sup>v2</sup> 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

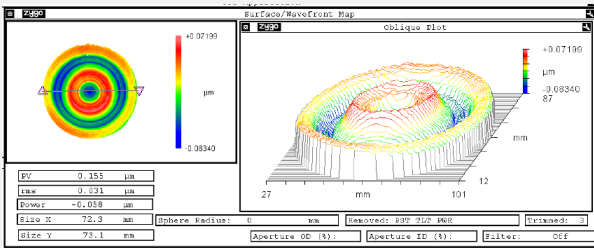
Wheel: Resin Bonded Diamond  
 Diamond Type: Natural  
 Grit: 8  $\mu\text{m}$   
 Wheel Diameter: 75 mm

### Machining Parameters

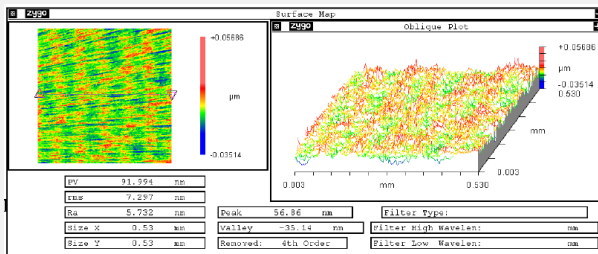
Work Spindle RPM: 145  
 Grind Spindle RPM: 6,700  
 Finish Depth of Cut: 1  $\mu\text{m}$   
 Finish Feedrate: 15 mm/min  
 Coolant: Challenge 300 Flood



## Metrology Results



**Form Accuracy: PV = 0.155  $\mu\text{m}$**



**Surface Finish: Ra = 5.732nm**

