

## Nanotech 450UPL<sup>v2</sup> Objective

To characterize XZB wheel normal machine performance when grinding Tungsten Carbide in terms of both surface finish and form accuracy

## Process

XZB Wheel Normal Grinding

## Application Summary

### Part Configuration

Material: Tungsten Carbide (Wc)  
 Diameter: 30 mm  
 Radius: 25 mm  
 Surface Type: CX Sphere

### Tool Configuration

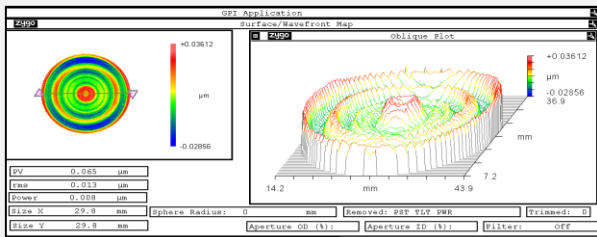
Wheel: Resin Bonded Diamond  
 Diamond Type: Natural  
 Grit: 3,000  
 Wheel Diameter: 20mm

### Machining Parameters

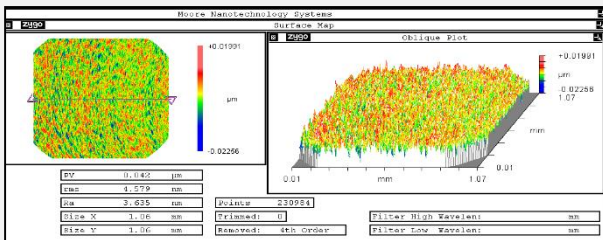
Work Spindle RPM: 128  
 Grind Spindle RPM: 45,000  
 Finish Depth of Cut: 1  $\mu$ m  
 Coolant: OMS



## Metrology Results



**Form Accuracy:** PV = 0.065  $\mu$ m



**Surface Finish:** Ra = 3.635  $\mu$ m

