

Application Report

Copper (Cu)



Moore Nanotech® 250UPL

Objective: To quantify surface finish and form results obtainable on OFHC Copper using the Nanotech 250UPL.

Process:

- 2-Axis Single Point Diamond Turning

Part Configuration:

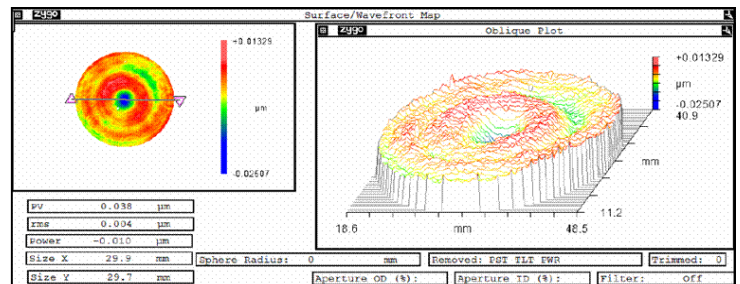
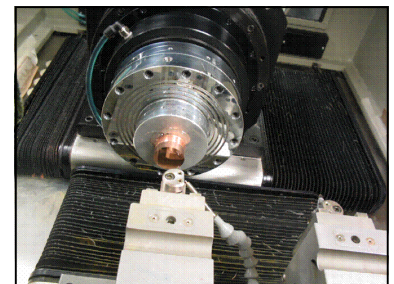
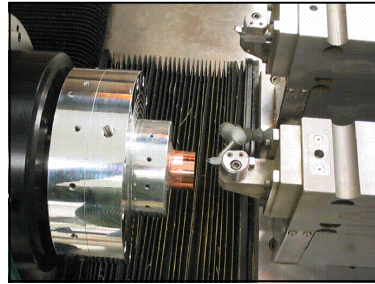
- **Material:** OFHC Copper
- **Diameter:** 30 mm
- **Radius:** 200 mm
- **Surface Type:** CX Spherical

Machining Parameters:

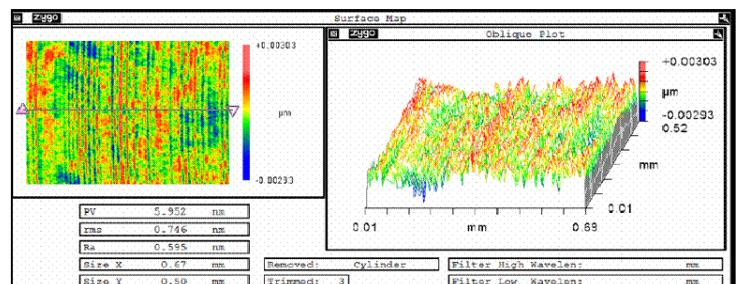
- **Spindle RPM:** 4000
- **Finish Feedrate:** 5 mm/min
- **Finish Depth of Cut:** 0.5 μm
- **Coolant:** Odorless Mineral Spirits

Tool Configuration:

- **Radius:** 1.5 mm
- **Top Rake:** 0 Degree



Form Accuracy: PV = 0.038 μm



Surface Finish: Ra = 0,595 nm