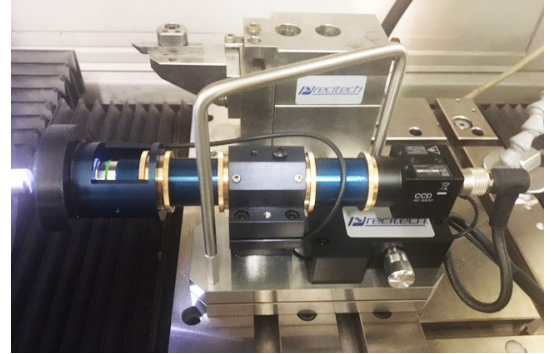


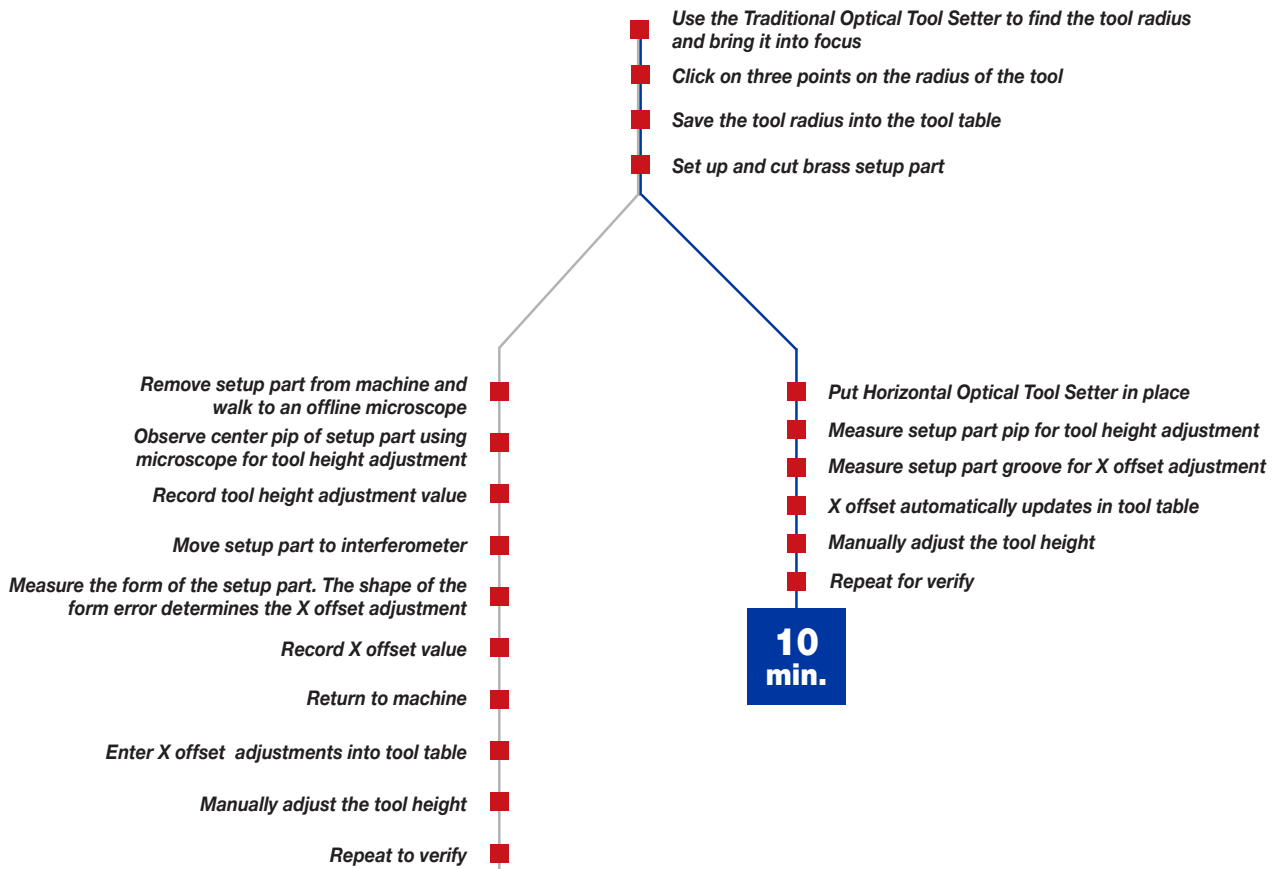
Uptime is the most critical element in maximizing the productivity of your ultra-precision machine. The most significant portion of unproductive time on such machines is tool setting. The longest step in this process is using off-machine metrology to measure setup parts. Using Precitech's Horizontal Optical Tool Setter to measure setup parts on the machine decreases unproductive time by up to 30 minutes.

- ▶ **Significantly reduces time to perform a tool set**
- ▶ **Frees up offline metrology for their intended purpose, measuring final components**
- ▶ **Relative measurements, not dependent on the accuracy on the kinematic mount**
- ▶ **Removes potential for operator errors**
- ▶ **Based on proven technology**



**Traditional Tool Setting Process Using Off-Machine Metrology**

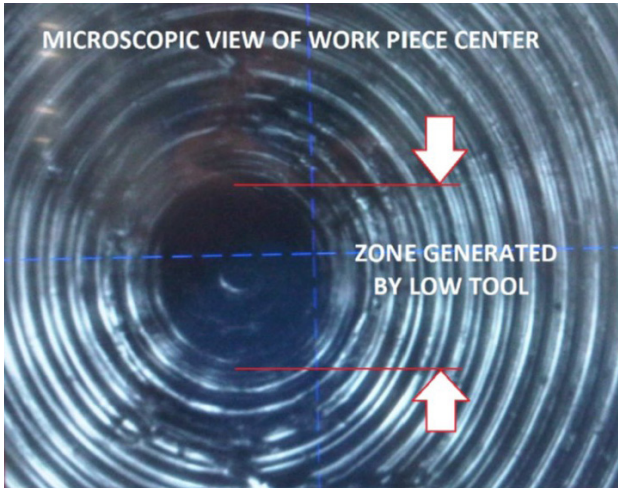
**Tool Setting with On-Machine Metrology**



**20-40 min.**

**10 min.**

\* First three steps can be skipped if using the radius specification from the tool manufacturer

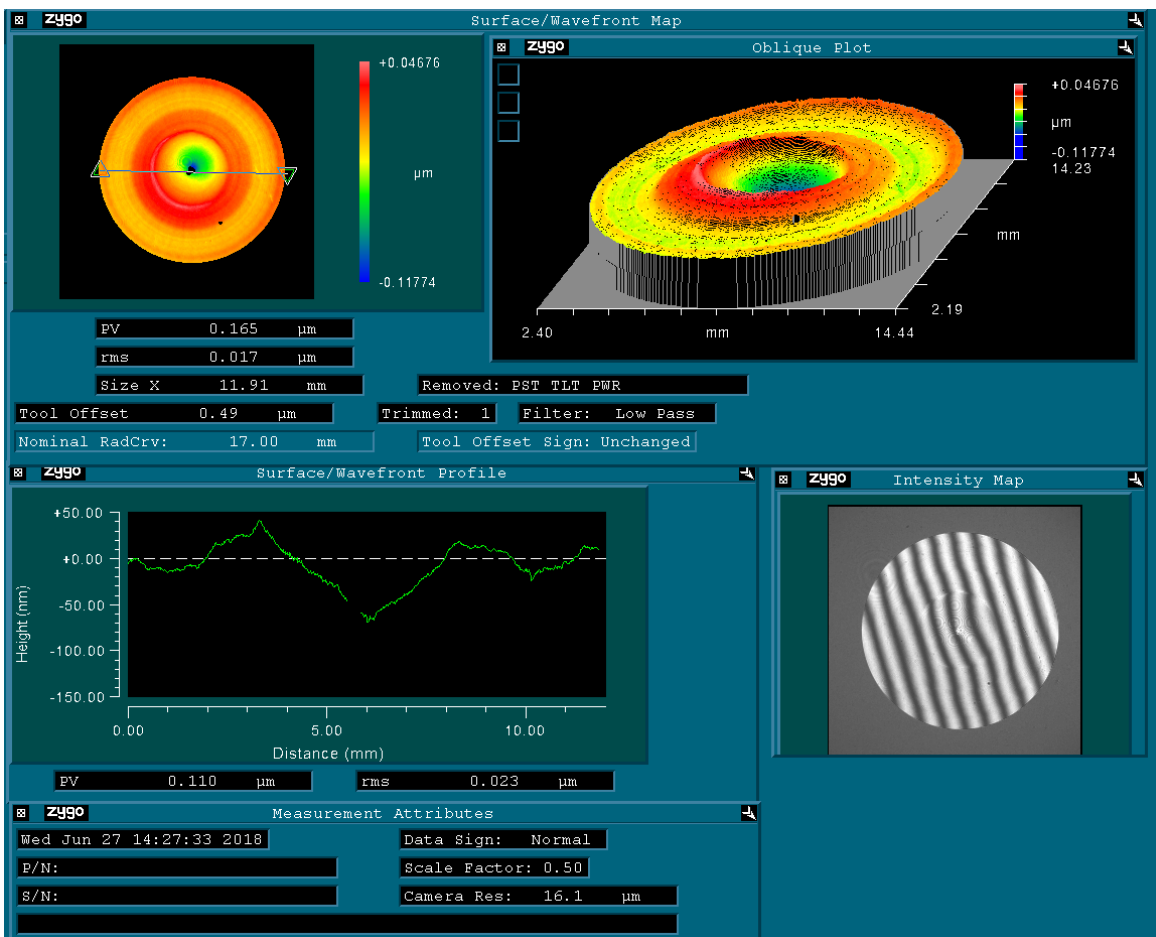


On screen reports, "Zero to Cursor Distance" = 1/2 the required tool height adjustment



On screen reports, "X Offset" value automatically updated in to tool table

## Process reliably sets tool height and X offset to within 1 µm accuracy



The industry standard method for tool setting with offline metrology, demonstrates the capability to set tools using on-machine metrology to under 0.5 µm. Measurements done on a Zygo® Verifire™ interferometer.