

WYKO NT1100 3-D Optic Profiling System



Modes:

1. Vertical Shift Interference (VSI):

- Maximum measurable topography is 1mm and there are some limitation to measure slopes depending on the optics numerical aperture and surface roughness

2. Phase Shift Interference (PSI):

- The PSI mode, based on optical phase-shifting, is dedicated to roughness measurements with maximum 150nm pick to valley topography. The system is able to run automatic stitching to grab larger fields.

• Optics:

1. A tungsten halogen lamp provides the white light. Its brightness can be adjusted.
2. 2 filters are available mainly for the PSI mode: High Mag filter (orange) and Low Mag (red). In principle, the VSI mode does not need filter.
3. 3 objectives included interferometer are available: one Michelson (5.0X) and 2 Mirau (20X and 50X). A manual turret allows switching from one to one.
4. 3 different FOV (Field Of View) are available: 0.5, 1.0 and 1.5. FOV are lenses placed between the camera and the objective to adjust the field size of view.
5. A CCD camera grabs images with interferences.
6. A TFT monitor is available to localize the field of interest and to find the fringes.
7. A focus lever allows lifting or dropping the optics column.

• Stage:

1. X tilt and Y tilt are adjusted with 2 encoders
2. X and Y translation is operated with the software