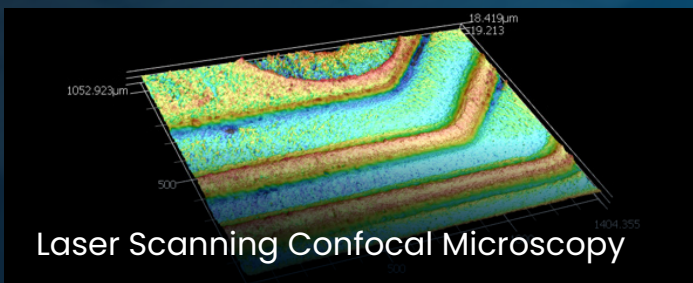


Optical Microscopy and Profilometry Services

With the Covalent Platform

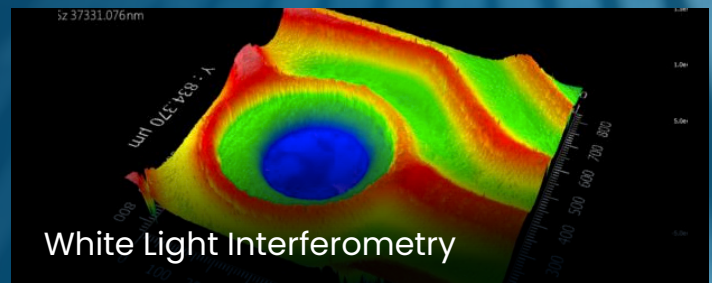
Whether you are looking to measure surface finish, roughness, or critical dimensions of surface features and structures, Covalent's optical microscopy and profilometry services can provide you the insight you need. All of Covalent's optical imaging techniques are non-contact and non-destructive, and generate fast, quantitative insight into the morphology and topography of materials. Using robust imaging and profilometry analysis software, Covalent's expert team of microscopists capture key structural data from your sample and deliver presentation-ready reports at quick and dependable turnaround times.

The Solutions We Offer



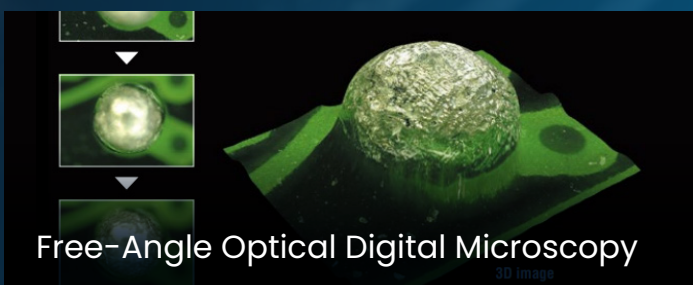
Laser Scanning Confocal Microscopy

- Non-contact, high-resolution imaging
- 16x depth of field compared to conventional systems
- True-color and laser intensity depth measurements at every pixel



White Light Interferometry

- Coherence scanning interferometry yields high lateral and vertical resolution
- Rapid imaging analysis
- Output 2D and 3D models of surface height



Free-Angle Optical Digital Microscopy

- Multiple customizable lighting and imaging modes
- Particle size and grain boundary analysis modes
- Enables 3D image output



Wide Area 3D Patterned Light

- Integrated 3D imaging and dimensional measurement
- Fully automated stitching of large-area images
- Compare or export 3D CAD models

Cutting-Edge Instruments



Keyence VK-X1100

- Lateral and vertical resolution limits better than 1 micron
- Magnification up to 28,800X



Zygo ZeGage Plus

- Superior lateral resolution to chromatic confocal, laser confocal, and wide-area 3D patterned light measurements
- High vertical resolution (~ 1nm)



Keyence VHX-6000

- High-precision, automated *in situ* dimensional analysis
- Flexible illumination modes



Keyence VR-5200

- Vertical resolution limits below 10um
- 5 times the measurable height range of conventional systems

Covalent's Optical Microscopy and Profilometry Group

Covalent's team of experts use cutting-edge instrumentation to deliver affordable, impactful imaging and profilometry analysis with fast turn-around times. Covalent Metrology partners with some of the world's top instrument manufacturers to ensure you have the expertise and advanced analytical tools necessary to solve your most complex challenges.

Get a quote at covalentmetrology.com