

HIROX 3D LIGHT MICROSCOPE

The Hirox digital light microscope comprises a motorised stage and motorised lens system that enables true colour imaging of both macro samples (large areas at low magnification) and high resolution using a 5000x lens. Software control of the lenses and acquisition automation also enables focused imaging of topographic surfaces, profilometry, roughness measurements and 3D modelling.

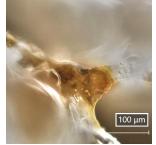
Application Examples

- High resolution, true colour images of biological and mineral samples
- 3D profiling of corrosion pits
- Image stitching covering a large area, such as a brick or concrete sample
- Real time video recording of process details from various angles

25 µm scale bar image

showing striations within an

impact melt grain



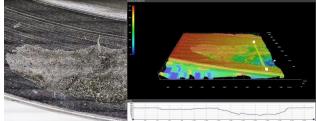
Glass from an impact melt site from a meteorite, demonstrating bubbles and impurities

For more information

Microscopy & Microanalysis Facility (MMF) Website: jdlc.curtin.edu.au Phone: +61 8 9266 7511 Email: MMF@curtin.edu.au

Key Capabilities

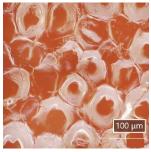
- Imaging over a wide range of magnifications (20x 5,000x). High resolution imaging (down to $0.5 \ \mu$ m) across the entire sample (up to $100 \ \text{cm}^2 \ \text{size}$) with automatic stitching capability
- 3D modelling with quantitative measurements of height, roughness and volume
- Isometric view with the rotary head attachment
- Reflective sample imaging using polarisers and diffusers



Software analysis of a corrosion pit within metal using 3D tiling



Large area, stitched image of a piece of tomato



Single image from the stitched image at left, using the multi-focus function to show cell structures

