



# 3D X-ray microscope

Zeiss Xradia Versa 520

State-of-the-art X-ray microscope, capable of generating manipulable, three-dimensional renderings of objects in extraordinary detail.

## Features and benefits

- Submicron X-ray imaging capability
- First-of-its-kind compositional contrast system, with a true spatial resolution of 0.7µm and a minimum voxel size of 70nm
- High-specification XRM features a unique two-stage process based on synchrotron-calibre optics
- Industry-best resolution and contrast
- High-aspect-ratio tomography (HART) mode for flat samples
- Time-dependent (4D)/in-situ tension/compression studies
- Dual-energy contrast optimiser allows imaging of samples that contain a range of materials with similar radiographic contrast

## Some applications

- Applications across a number of industry sectors, including oil and gas, aerospace, medical and electronics
- Used to characterise materials, observe fractures and their mechanics and perform in-situ, 4D tensile compression studies
- In electronics it can be used for failure analysis, package construction analysis and manufacturing process optimisation
- Characterisation of additive manufacturing powder feedstock

## Technical specification

- Spatial resolution <700nm
- Minimum achievable voxel <70nm
- Two-stage magnification
- Non-destructive interior tomography
- Wide field mode and vertical stitching
- High-accuracy 160kV transmission µ-focus X-ray source

