

nano3DX

Rigaku high resolution XRM

X-ray submicron-computed tomography (submicron CT) is one of the most powerful methods for 3D visualization and inspection of any type of sample or product. This non-destructive method provides sufficient resolution and contrast to evaluate any microstructural features with ability to resolve elements even below 1 micron. Moreover, this method requires minimal/no sample preparation, eliminating the complicated tasks such as embedding, coating or this slicing required with other high-resolution methods. The Rigaku nano3DX represents the state of the art in laboratory-based nanoscale X-ray imaging. Utilization of this device together with deep learning methods comprises unmatched tool from R&D to production and inspection.

The nano3DX is a true X-ray microscope (XRM) with the ability to measure relatively large samples at very high resolution. This is accomplished by using a high-powered rotating anode X-ray source and a high resolution sCMOS X-ray camera. The rotating anode provides for fast data acquisition and the ability to switch anode materials easily to optimize the data acquisition.

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