

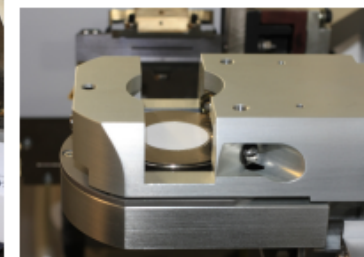
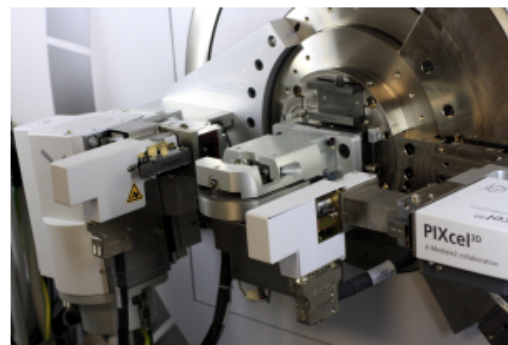
PANALYTICAL Empyrean diffractometer

Cu, Mo ou Ag anode (8,1 – 17,5 – 22,2 keV)

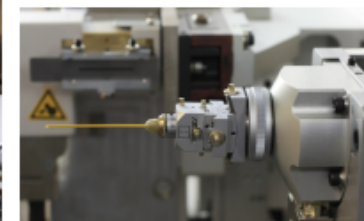
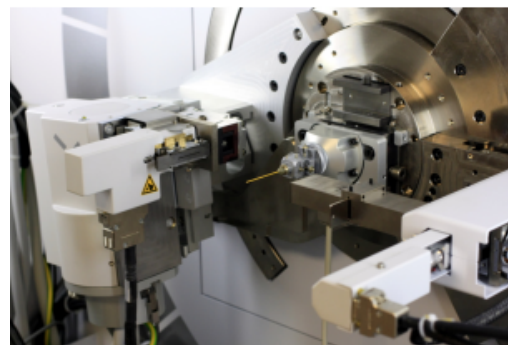
This versatile instrument allows the analysis of polycrystalline materials like the 2 XPertPro MPD diffractometers but it is mainly used for the study of amorphous materials, partially crystallized objects and nanomaterials by diffraction or X-ray scattering. Mounted with a copper anode, the PixCel detector allows very fast conventional acquisitions and high resolution measurements. The silver anode offers the possibility of conducting wide angle scattering measurements (WAXS) in a wide range of Q scattering vector (up to 22A-1). In this configuration, it is particularly used for structural studies by analysis of the pair distribution function (PDF).

Specificities :

- Sealed tube with Co, Cu, Mo or Ag anode.
- Two-circle θ - θ goniometer.
- Scintillation detector or CCD detector PixCel3D (0, 1 or 2D).
- Range of collimators adapted to the source and the technique.
- Measurements in Bragg-Brentano geometry (reflection).
- Measurements in transmission (Debye-Scherrer) on capillaries.
- Monocrystalline silicon (zero background) sample holders for analyzing small quantities.
- 30-position automatic sample changer.



Conventional measurement in reflection geometry using the PixCel3D detector.



Measurement in transmission geometry on a capillary with the scintillation detector (high energies).