

ADVANCED SPECTROSCOPY & MATERIAL ANALYSIS

XRD

X-ray diffraction for crystalline phase identification and polymorph screening.

DESCRIPTION

Directs X-rays at a crystalline sample and records the angles at which they diffract. Because the pattern is set by the crystal lattice, it distinguishes polymorphs, salts and hydrates of the same molecule — differences no chemical assay will detect, but which change dissolution and stability.

APPLICATIONS

Polymorph identification and screening, crystallinity and amorphous content, phase purity of APIs and excipients, cement and mineral analysis.

METHOD & COMPLIANCE REFERENCE

X-ray powder diffraction is described in USP <941> and Ph. Eur. 2.9.33.

SUPPLIED AND SUPPORTED IN BANGLADESH

- Import, customs, delivery, site preparation and installation.
- IQ/OQ qualification, scheduled calibration and validation support.
- Genuine spare parts, consumables and operator training in Dhaka.

Specifications, capacities and model options vary by configuration and are confirmed with each quotation. This sheet is generated from our product catalogue; the full manufacturer datasheet is available on request.