

	RToo	X-ray tube + film scanner	X-ray tube + Imaging plate scanner	X-ray tube + Flat panel Varex 1207	Medical CT Philips IQon Spectral CT	Industrial CT tphoenix v tome x c	Bruker M6 Jetstream	Panalytical Empyrean XRD
Material composition differentiation ("colour X-rays")	✓	-	-	-	✓	-	✓(XRF)	-
Large area 2D X-ray images	✓	✓	✓	Custom mechanics required	-	-	✓	-
2D image size in single exposure	60x120 cm	30x40 cm	35x43 cm	12x7 cm	-	41x41 cm	80x60 cm	1.4x1.4 cm
Number of grey levels digitised	16,777,216	65,536	65,536	3,547	N/A	10,000	-	11,810
Dynamic range [dB]	144	96	96	71	N/A	80	-	81
CT (3D computed tomography)	✓ 10x10x10 cm ³	- N/A	- N/A	- N/A	✓ 210x70x70 cm ³	✓ 50x50x100 cm ³	- N/A	- N/A
CT scan of region-of-interest	✓	N/A	N/A	N/A	-	-	N/A	N/A
Detector resolution [µm]	55	40	50	74.8	500	100	100	55
Online images	✓	-	-	✓	-	✓	✓	-
Chemical processing	-	✓	-	-	-	-	-	-
Digital data readout	✓	-	✓	✓	✓	✓	✓	✓
Offline digitisation required	-	✓	✓	-	-	-	-	-
Extension by other imaging modalities	✓	-	-	-	-	-	-	-
Laser surface scanning	✓	-	-	-	-	-	-	-
Macro-photography IR reflectography (spectral) UV fluorescence imaging 3D photogrammetry visualisation Hyper-spectral imaging XRF imaging X-ray diffraction Air-coupled ultrasound	extension under development	-	-	-	-	-	-	-
Standard price	240,000	40,000	70,000	70,000	800,000	600,000	240,000	200,000