

Examples of the Equipment for MCP Applications

Illustrative Field,etc	Mass spectroscopy	Semiconductor inspection	Surface analysis
Illustrative Application	Time-of-flight mass spectroscopy (TOF-MS) (MALDI)	Scanning electron microscope (SEM)	Soft X-ray spectroscopy (SXS)
Ion	Time-of-flight mass spectroscopy (TOF-MS) (LC-MS)	Scanning ion microscope (SIM)	Reflection medium energy electron diffraction (RMEED)
Ion	Time-of-flight mass spectroscopy (TOF-MS) (GC-MS)	Electron beam measuring system (EBMS)	Low energy electron diffraction (LEED)
Ion	Quadrupole mass spectroscopy (Q-MS)	Electron or ion beam lithography	Field ion microscope (FIM)
Ion	Double focusing mass spectroscopy (Sector-MS)	Mask aligner	Transmission electron microscope (TEM)
Ion	Gas or liquid chromatographic mass spectroscopy (GC/LC-MS)	FIB system	Soft X-ray microscope (SXM)
Ion	Inductive-coupled plasma mass spectroscopy (ICP-MS)	Auger electron spectroscopy (AES)	Positron detector
Ion	Secondary ion mass spectroscopy (SIMS)	Ion scattering spectroscopy (ISS)	
Electron		Electron spectroscopy for chemical analysis (ESCA)	
Electron, Ion		Rutherford backscattering spectroscopy (RBS)	
Electron		Vacuum UV spectroscopy (VUVS)	
Electron, Ion		Soft X-ray spectroscopy (SXS)	
Electron		Reflection medium energy electron diffraction (RMEED)	
Ion		Low energy electron diffraction (LEED)	
Ion		Field ion microscope (FIM)	
Electron		Transmission electron microscope (TEM)	
X-ray*		Soft X-ray microscope (SXM)	
Positron		Positron detector	

*Note: The applications of X-ray input are covered by the exemption “1. Lead, cadmium and mercury in detectors for ionising radiation.” in Annex IV of 2011/65/EU