

	Analytcs	Semiconductor	Coating	Industry	R & D
	Electron microscopy				
	Leak detection				
	Mass spectrometry				
	Surface analysis				
	Plasma monitoring				
	Residual gas analysis				
	Lithography				
	PVD (Physical Vapor Deposition)				
	CVD (Chemical Vapor Deposition)				
	Plasma etching				
	Implantation – source				
	Implantation – beamline				
	Inspection				
	Bonding				
	MBE (Molecular Beam Epitaxy)				
	Load locks, transfer chambers, handling systems				
	Flat panel display (FPD)				
	LED / OLED				
	Hard disk coating				
	Photovoltaics				
	Glass coating (PVD)				
	CD, DVD, Blu-ray production (PVD)				
	Optical coating (PVD)				
	Wear protection (PVD, CVD)				
	Hard coating				
	Medical technology				
	Industrial leak detection				
	Electron beam welding				
	Insulation vacuums				
	Bulb and tube manufacturing				
	Heat treatment				
	Vacuum drying				
	Vacuum furnaces				
	Nuclear research				
	Fusion technology				
	Plasma research				
	Particle accelerators				
	Space simulation				
	Low temperature research				
	Elementary particle physics				
	Nanotechnology				
	Biotechnology				

■ = recommended

Manipulators

Z-axis manipulators	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
XY-axis manipulators	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rotary manipulators	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Adjusting devices for angle and length compensation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rotary feedthroughs	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rotary/linear feedthroughs	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Linear feedthroughs	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

	Nominal diameter					Deflection		Axial hub								Rotary and adjusting angle			Resolution						Actuator type										
	DN 16	DN 25	DN 40	DN 63	DN 100	+/- 12,5 mm	+/- 25 mm	10 mm	25 mm	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm	400 mm	500 mm	750 mm	3°	180°	360°	0.05 µm	0.5 µm	1 µm	1.25 µm	2 µm	5 µm	10 µm	Manual	Motorized	Pneumatic				
Manipulators																																			
Z-axis manipulators			■	■	■						■	■	■		■	■									■		■			■	■				
XY-axis manipulators			■	■	■	■	■																	■	■	■	■			■	■				
XYZ-axis manipulators			■			■					■	■	■		■	■											■			■					
Rotary manipulators			■	■	■																■									■					
Adjusting devices for angle and length compensation			■	■	■			■											■											■					
Bellows-sealed rotary feedthroughs	■		■																	■	■									■			■		
Elastomer-sealed feedthroughs	■	■	■	■																		■								■					
Magnetic rotary feedthroughs	■		■																			■								■	■				
Elastomer sealed rotary/linear feedthroughs	■	■	■											■			■	■				■								■					
Magnetic rotary/linear feedthroughs			■											■			■	■				■								■					
Bellows-sealed linear feedthroughs	■		■					■	■	■													■	■				■	■	■	■				