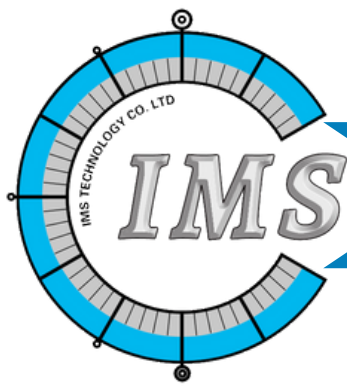




CONTOUR & ROUGHNESS INTEGRATED MACHINE

FEATURES

- The first domestic technology of autonomous intellectual property rights: using grating sensors to meet the measurement of roughness and contour size at the same time
- Use the interference to scan the grid ruler, which can reach 1nm, which can meet the super high precision measurement
- Ultra -high resolution sensor can meet the measurement of roughness and contour dimensions at the same time. No need to change the sensor during the measurement process
- A large number of processes and high precision are compatible, which can meet the integrated measurement of irregular surface roughness and size such as arc surface, column surface, free curved surface
- The unique roughness evaluation algorithm and position compensation method, effective correction and compensation surface measurement is the measurement error of non -plane, and effectively guarantee the roughness of the curved surface, the roughness of the arc workpiece as high accuracy and high accuracy as the plane roughness.
- No need to modify mathematical methods and close to zero friction coefficient rails, which can maintain a high - precision measurement benchmark for a long time. The accuracy is consistent.
- Custom template, batch measurement, automatic marking



TECHNICAL PARAMETERS

Model		IMMD-SPC100	IMMD-SPC150	IMMD-SPC200
Roughness	Ra, Rq, Rz (Ry), Rz (DIN), R3z, Rz (jis), Rp, Rv, Rt, Rsk, Rsm Rc, Rpm, Rku, Rdq, Roc, Mr1, Mr2, Rpk, Rvk, Rk, Rdc, A1 ,A2 ,Rx ,AR ,Rcp, Rmax, Rz-ISO			
Original contour	Pt, Pa, Pp ,Pv, Pq, Pc, Pku, Psk, Pdq, Psm, Pdc, Pmr, Pz			
Waviness	wt, wa, wp, wv, wq, wc, wku, wsk, w, wx, wz, wsm, wdc, wte, wmr, Aw, c (wmr) wmr(c), wdq			
Contour measurement	Point: point, midpoint, intersection, highest point, lowest point Line: straight line, tangent line, perpendicular line, parallel line, bisector Circle: Partial circle, ellipse, tangent circle Angle: angle, horizontal angle, vertical angle, angle, bisecting angle Position tolerance: straightness, convexity, arc contour, perpendicularity, parallelism Auxiliary generation: including auxiliary points, auxiliary lines , auxiliary circles			
Measure range	X axis (horizontal)	100mm	150mm	200mm
	Z1 axis,sensor	±20mm	±25mm	±30mm
	Z axis (column)	450mm	500mm	500mm
Contour/ Profile Specs	Linear accuracy X	± (0.8+0.02L) μm (L: measuring range)		
	Linear accuracy Z1	± (0.8+0.05H) μm (H: measuring height)		
	Angle	≤±1'		
	Arc	≤±(1.2+R/12)μm R 0.5 mm~10mm (R: curvature radius)		
	Straightness	0.6μm/100mm	0.6μm/100mm 1.0/150mm	0.6μm/100mm 1.2/200mm
Rroughness Specs	Indicating error	≤±(5nm + 0.05)		
	Residual noise	≤0.005μm		
	Indication repeatability	3%		
	Cutoff wave length	0.025、 0.08、 0.25、 0.8、 2.5、 8mm		
	Evaluated length	λc×2、 3、 4、 5、 6、 7、 8		

