

**Precision Test - YL 1200**

Item	Definition	Description	Tolerance			Actual Measured Result
			Axis Movement Quantities			
			<500	>500, <1000	>1000, <2000	
1	Work table (limited to X stroke)			0.04		0.02 0.01
2	X axis straight motion measurement	X - Z	0.04/m	0.04/m	0.05/m	0.002
		Y - Z	0.04/m	0.04/m	0.05/m	0.003
		X - Y	0.005/500mm, direction change: 0.0025mm 0.005/500mm, motion: 0.002mm			0.002
3	Y axis straight motion measurement	X - Z	0.04/m	0.04/m	0.05/m	0.003
		Y - Z	0.04/m	0.04/m	0.05/m	0.002
		X - Y	0.005/500mm, direction change: 0.0025mm 0.005/500mm, motion: 0.002mm			0.002
4	X axis motion and structure surface parallel measurement			0.01/500		0.01
5	Y axis motion and structure surface parallel measurement			0.02/500		0.008
6	Work table perpendicularity	X - Z		0.008/500		0.006
		Y - Z		0.008/500		0.005
7	X motion and T slots parallel measurement			0.01/500		0.006
8	X and Y axis motion perpendicularity			0.01/300		0.006
9	Z axis motion straight movement	Z - X	0.005/500mm, direction change: 0.0025mm			0.004
		Z - Y	0.005/500mm, motion: 0.002mm			0.003
10	perpendicularity - Main shaft to work table	Z - X		0.01/300		0.006
		Y - Z		0.01/300		0.002
11	Multi axis motion inter-perpendicularity	Z - X		0.01/300		0.006
		Y - Z		0.01/300		0.005
12	Main shaft circularity		Shaft end, 0.005			0.002
			To shaft end, 300 mm, 0.012			0.006
13	Main shaft Z direction motion			0.005		0.002
14	Main shaft Z outer circularity			0.005		0.002
15	Main shaft Z end circularity			0.005		0.005

**Repeatability**

1	Minimum linear motion	X		0.005		0.002
	quantities	Y		0.005		0.002
	Tolerance	Z		0.005		0.002
	0.005 reverse setpoint B: 8 Pulse					