

Specifications

1. Wafer size	Max. 152.4 mm (ϕ 50.8 to ϕ 152.4)	Max. Dia 6" (2" to 6")
2. X-axis (left-right movement of chuck table)		
1) Maximum Table Stroke	160 mm	6 ⁵ / ₁₆ "
2) Cutting Range	20.4 mm to 153 mm in 1 mm increments	1" to 6" in 1/2" increments
3) Cutting Feed Speed	0.3 to 300 mm/sec.	0.012" to 12"/sec.
4) Return Speed	300 mm/sec.	12"/sec.
3. Y-axis (forward-backward movement of spindle)		
1) Maximum Spindle Stroke	160 mm	6 ⁵ / ₁₆ "
2) Spindle Index Range	0.002 mm to 99.998 mm	0.0001" to 4"
3) Indexing Steps	in 0.002 mm increments	in 0.0001" increments
4) Indexing Speed of Spindle	30 mm/sec.	1.18"/sec.
4. Z-axis (up-down movement of spindle)		
1) Vertical Stroke of Spindle	20 mm	0.7874"
2) Range of Depth Left Uncut	0.005 mm to 19.995 mm	0.0002" to 0.7872"
3) Step of Depth Left Uncut	in 0.005 mm increments	in 0.0002" increments
4) Jog adjustment	0.0025 mm increments	0.0001" increments
5) Cutting Feed Speed	15 mm/sec.	0.59"/sec.
6) Return clearance of Spindle	0.7 mm (in Mode A alone)	0.028"
7) Cutting Mode (FIX)	A, B, C, and D (dressing mode)	
Cutting Mode (VAR) (optional)	E to I	
5. θ -axis (chuck table rotation)		(Manual θ -axis)
1) Rotation Range	0 to 90 degree	90 degree
2) Min. Index setting	1 degree	—
3) θ Orientation (Min. Index step)	0.00225° (8.1")	Fine Adjustment Range \pm 3°
4) Rotation Speed	3.7 sec/90°	—
6. Spindle Motor		
1) Rotation speed	30,000 r.p.m. (Variable range 3,000 to 40,000 r.p.m.) High frequency air spindle (water-cooled type)	
2) Output power	1.5 kW (at 30,000 r.p.m.)	

7. Alignment Microscope	With monitor TV (5")	
8. Accuracy		
1) Chuck table flatness	0.005 mm/ 152.4 mm	0.0002"/6"
2) Y-axis Index Accuracy		
Unit Pitch Error	0.003 mm	0.00012"
Accumulated Pitch Error	0.005 mm/152.4 mm	0.0002"/6"
9. Utilities		
1) Power Supply	3 Phase AC 200 V \pm 10% 50/60 Hz	
2) Power Consumption	3.0 kVA	
3) Air Supply	Pressure	5.0 kgf/cm ² G 71 p.s.i.G
	Flow Rate	250 Nℓ/min. 7.3 c.f.m.
4) Water Supply	Pressure	3 kg/cm ² 43 p.s.i.
	Flow Rate	6.5 ℓ/min. 1.6 g.p.m.
	2 Systems;	(Deionized Water used for cutting Tap Water used for spindle)
	Pressure	3 kg/cm ² (Deionized Water) 43 p.s.i.
	Flow Rate	4.5 ℓ/min. 1.1 g.p.m.
	Pressure	3 kg/cm ² (Tap Water) 43 p.s.i.
	Flow Rate	2 ℓ/min. 0.5 g.p.m.
5) Dimensions of Machine (WxDxH)	965 x 920 x 450 mm	38" x 36.2" x 17.7"
6) Weight of Machine	Approximately 313 kg	689 lb
	(Including Work Table 409 kg-900 lb)	
7) Coating Color (Standard)	Munsell 2.5Y4/2	