

## Fully Automatic Grinder DFG8540



Wafer Diameter		Max ø 8" (ø 4" - ø 8")
Models		2-spindles, 3-rotary-chuck table
Application		Ultra-thin grinding (100 um or less)
Grinding Method		In-feed grinding with wafer rotation
Spindle	Type	Air bearing with high frequency motor
	Number of axes	2
	Output (kW)	4.2
	Revolution speed(min <sup>-1</sup> )[rpm]	1,000 - 7,000
	Z-axis vertical stroke(mm)	120 (with zero point)
	Z-axis vertical grinding feed speed (mm/s)	0.0001 - 0.08
	Z-axis vertical fast feed speed(mm/s)	50
	Min. Z-axis vertical movement(um)	0.1
	Min. Z-axis vertical movement resolution(um)	0.1
Height Gauge	Measurement range(um)	0 - 1,800
	Resolution(um)	0.1
	Repeatability(um)	±0.5
Wafer Chuck Table	Chuck table type	Porous chuck table
	Chuck method	Vacuum
	Number of revolutions	0 - 300
	Number of chuck tables	3
	Chuck table cleaning	Backflushing of water and compressed air is combined with oilstone cleaning and brush cleaning
	Spark Out (chuck table revolutions setting)	0 - 999
Grinding Wheel	Diamond wheel(mm)	ø 200
Wafer Handling	Cassette storage quantity	2

Section / Wafer Cleaning Section	Cassette flow	Same flow and open flow
	Spinner unit	Water washing and drying
Vacuum Unit	Discharge speed	29/36 (m <sup>3</sup> /h) 50/60 (Hz)
	Achievable pressure(kPa·G)	-90 (water supply temperature 15 – C, water supply flow rate 1L/min)
	Electric motor (kW)	1.5
	Water flow rate (L/min)	When supplied water temperature is greater than 22 – C : 3 When supplied water temperature is less than 22C : 1
Grinding Accuracy	Thickness variation within one wafer(um)	less than 1.5 (when grinding 8" wafers with included chuck tables)
	Thickness variation between wafers(um)	less than ±3
	Finish surface roughness(um)	Ry 0.13 (with #2000finish) Ry 0.15 (with #1400finish)
Machine dimensions (W x D x H) (mm)		1,200 x 2,670 x 1,800
Machine weight (kg)		Approx. 3,100