Disco DFG 841

Specifications		DFG841	
Wafer Diameter		MAX₵200 (₵4"~8")	(mm)
Grinding Method		In-feed grinding with wafer rotation	
Spindle	Type used	Air bearing with a highfrequency motor	
	No.of spindles	2	
	Output	4.2	(kW)
	Spindle speed	1000~7000 (Each spindle independently adjustable,with a real-time display of both rpmn and spindle	(min^{-1}[rpm])
	Vertical stroke	110	(mm)
	Vertical in-feed speed range	0.00001~0.08	(mm/s)
	Vertical rapid feed speed	50	(mm/s)
	Minimum step for vertical movement	0.1	(㎛)
	Minimum resolution for vertical movement	0.1	(㎛)
Height Gauge	Measurable range	0~1000	(㎛)
	Resolution	0.1	(㎛)
	Accuracy	±0.5	(㎛)
Wafer Chuck Table	Table type	Porous chuck table	
	Chucking method	Vacuum	
	Revolution Speed	0~300(Can be set in 1 rpm Increments)	min^{-1}[rpm])
	No. of tables	2	
	Chuck table cleaning	backflushing of water and compressed air is combined with oilstone cleaning	
	Spark-out revolution control	0~999 reolutions	
Grinding Wheel		₵200(₵8")diamond wheel	(mm)
Wafer Loading/Unloading	Cassette storage quantity Cassette flow Spinner unit	Two cassettes Same flow(return to original slot) Wafer washing and drying on both sides	
Non-Recirculating GrindingWafer Supply System And Vaccum Pump System(standard accessory)	Water flow rate	15	(ℓ/min)
	Water pressure	0.3[3.0]	(MPa·G[kgf/cm^2·
	Air discharge rate	560/660 ℓ/min 50/60Hz (-74kpa)	(ℓ/min)
	Air pressure	-95	(kpa)
	Electric motor	Grinding water:0.75	(kW)
	Water flow rate	Vacuum pump:1.5	(kW)
	(For water temperature greater than	5	(ℓ/min)
	(For water temperature greater less	5	(ℓ/min)
Grinding Accuracy(₵8" wafer)	Planarity accuracy (within wafer)	0.0015 (when a dedicatede chuck table is used)	(mm)
	Thickness accuracy (wafer to wafer)	±0.003	(mm)
	Finish surface roughness	around Ry 0.13 (at #2000finish) around Ry 0.15 (at #1400finish)	(㎛)
Others	Power source	3-phase 200V AC±10%or less 50/60Hz	
	Power consumption	17	(kVA)
	Grounding resistance	100Ω or less	
	Electrical noise	2,000 V or less with a pulse width of 500 ns(square wave)	
	Air pressure	0.5~0.8[5.0~8.0]	(MPa·G[kgf/cm^2·
	Air flow rate	300	(Nℓ/min)
	Water pressure	0.2~0.3[2~3]for cooling water 0.2~0.3[2~3]for grinding waetr	(MPa·G[kgf/cm^2·G])
	Water flow rate	9 or more for cooling water, 15 or more for grinding water	(ℓ/min)
	Exhaust duct capacity	4 (at the duct connection port on the main unit)	(m^3/min)
	Machine dimensions	1,050W*2,150D*1,710H	(mm)
	Machine weight	2,300	(kg)