



Fully Automatic In-Feed Surface Grinder DFG8540/8560

Advanced thinning power for large wafers

Grinder of choice

The DFG8540/8560 improves upon the functionality and performance that made the DISCO 800 series the grinder of choice at facilities around the world.

Thin grinding (<100 μm)

Advanced handling systems and design features facilitate high yield for thin wafer grinding.

Design flexibility

The DFG8540/8560 can be integrated with DISCO's Dicing Before Grinding (DBG) system as well as polishers (DFP8140/8160) for in-line processing solutions.



DFG8540

Improved grinding quality

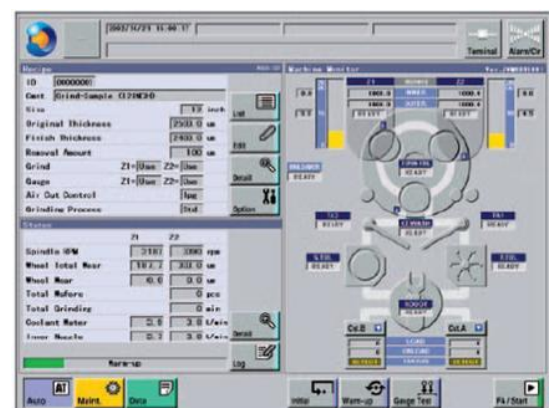
Through innovations in equipment design, both spindles now grind wafers at the same relative position. This improves single wafer thickness variation as well as wafer to wafer thickness variation.

Backward-compatibility

Supports the same proven technology of DISCO's 800-series grinding wheels, spindles, chuck tables and dresser boards.

Easy operation

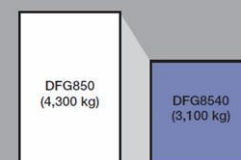
The DFG8540/8560 utilizes an LCD touch screen graphical user interface, making operation and maintenance intuitive and easy.



LCD touch screen

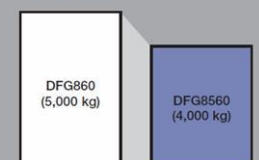
8" grinder weight comparison

1,200 kg weight reduction (28 %)



300 mm grinder weight comparison

1,000 kg weight reduction (20 %)



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Safe wafer handling with the thin wafer robot pick



Specifications

Specification		Unit	DFG8540	DFG8560
Wafer diameter		-	φ 8" (φ 4"/5"/6"/8")	φ 300 (φ 200/φ 300)
Grinding method		-	In-feed grinding with wafer Rotation	
Grinding wheels		mm	φ 200(φ 8") Diamond wheel	φ 300 Diamond wheel
Spindle	Rated output	kW	4.2	4.8
	Rated torque range	min ⁻¹	1,000 ~ 7,000	1,000 ~ 4,000
Grinding Accuracy	BG	Thickness variation within one wafer	1.5 or less (with dedicated chuck table)	3.0 or less (with dedicated chuck table, φ 300mm wafer)
		Thickness variation between wafers	±3.0 or less	
	Finished surface roughness	μm	Ry 0.13(with #2000 finish) Ry 0.15(with #1400 finish)	
Machine dimensions(WxDxH)		mm	1,200 × 2,670 × 1,800	1,400 × 3,322 × 1,800
Machine weight		kg	Approx.3,100	Approx.4,000

Environmental conditions

- Use clean, oil-free air at a dew point of -15 °C or less. (Use a residual oil: 0.1 ppm. Filtration rating: 0.01 μm/99.5 % or more).
- Keep room temperature fluctuations within ±1 °C of the set value. (Set value should be between 20 - 25 °C).
- Keep grinding water and cleaning water + 0 - 2 °C above room temperature (fluctuations within 1 °C over one hour).
- Keep spindle cooling water temperature between 20 - 25 °C (fluctuations within 2 °C over an hour).

• The machines should be used in an environment, free from external vibration. Do not install machine near a ventilation opening, heat generation equipment or oil mist generating parts.

• This machine uses water. In case of water leakage, please install the machine on the floor with sufficient waterproofing and drainage treatments.

* All the pressures are described using gauge pressure.

* The above specifications may change due to technical modifications. Please confirm when placing your order.

* For further information please contact your local sales representatives.