GRIND-X
OKAMOTO PRECISION SYSTEMS
Okamoto

Precision Back Grinder
Model GNX300B

Model GNX300B	
No. of Spindle	: 2
No. of Vacuum chuck	: 3
Spindle Motor	: 3.7 Kw
Grinding Mode	: Gauge
Work spindle Motor	: 1.0 Kw
Wafer size to grind	: 8 & 12“
Bearing type	: Air for Spindle

Full-Automatic Wafer Grinder for Production Available to dock Special Un-load unit/Polisher/Etcher and Mounter

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FEATURES

Model GNX300B grinder is a fully automatic continuous downfeed grinding machine. Wafers are handled through the machine by a robot, and load/unload arms. Two different stations are used for wafer cleaning after the final grind station. Chuck speed, grinding wheel, and grind spindle downfeed rate speeds can be used to manipulate grinder throughput, surface finish, and wheel life. A two-point in-process gauge measuring system controls wafer thickness under grind spindles 1 and 2. A three-point grind spindle angle adjustment mechanism is utilized for easily maintaining wafer profile (ttv); with the option for a motorized adjustment. The main motors are maintenance free AC servomotors. I/O data, grinding conditions, error messages are clearly visible on the GUI touch screen and downloadable through the computer. All computer logs are automatically saved for 30 days. SECS/GEM communication software is also available. In-line polish or etch system may be directly connected to the GNX300B.

SPECIFICATIONS

Maximum wafer-machining diameter of wafer	Ø8" to Ø12" (universal sizes available)
Grinding Spindle: Bearing type Motor Rapid feed speed Grind feed speed	Air bearing, maximum 3600 rpm 5.5 kw, 4P, high frequency motor 200 mm/min 1 to 999 μm/min
Grinding wheel size	Ø250 mm
Index Table: Number of work spindles Work spindle Bearing type Speed of Work Spindles	3 Mechanical Bearing, or Air Bearing (optional) 1 to 400 rpm
Automatic Sizing Device: Wafer thickness measuring system Wafer minimum setting size Wafer size display range	 2 point contact in-process gauge 1 μm 0 to 1.2 mm; extended range software available
Table Cleaning Device	Water + Ceramic block
Wafer Cleaning Unit	Water + brush, and spin/rinse dry station
Number of Cassettes	2 stations
Control Cabinet CRT Display Programming method	Mounted on the main body Color 17" GUI touch screen Touch screen
Utilities: Electric Power Cutting Water Consumption Cleaning Water Consumption Chiller Unit for Grind Spindle Head Air Consumption (dry air) Vacuum Pump Unit	3P, 200V, 20KVA 20 liter/min minimum 6 liter/cycle 5 liter/min (city water) 105 liter/min (5-7 kg/cm²) 1.5 kw motor, 55 Torrs, Exhaust 40 m³/hr 5 liter/min Coolant (city) water
Throughput	Ø8" = 40 wph, Ø8"= 30 wph (approximately)
Grinding Accuracy: Wafer thickness variation (ttv) Wafer to wafer thickness Roughness	Ø8" = 1.5 μm or less, Ø12" = 2.0 μm or less Ø8" = 1.5 μm or less, Ø12"= 2.0 μm or less Ø8" = 0.2 μm Rmax or less, Ø12"= 0.2 μm Rmax or less

Specifications subject to change without notice.