GRIND-X
OKAMOTO PRECISION SYSTEMS
Okamoto

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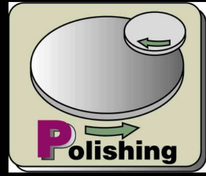

Precision Back Grinder & Polisher

Model GNX200BP

Model GNX200BP	
No. of Grind Spindle	: 2
No. of Grind Vacuum chuck	: 3
Spindle Motor	: 2.2 Kw
Grinding Mode	: Gauge
Work spindle Motor	: 0.75 Kw
Wafer size to grind + Polish	: 6 or 8””
Bearing type	: Air bearing

Full-Automatic Wafer Grinder and Polish In-Line system for wafer thinning in Production (50um capability). Available to dock Special Un-load unit or Direct to Mounter unit

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FEATURES

Model GNX200BP 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 a motorized adjustment. After completion at the grind station, the wafer transfers to Polish unit automatically. The local polishing unit removes subsurface damage for increased wafer die strength, and the ability to handle final thickness of 50 microns.

SPECIFICATIONS

Maximum wafer-machining diameter of wafer	Ø64” or Ø8”
Grinding Spindle: Bearing type Motor Rapid feed speed Grind feed speed	Air bearing, maximum 3600 rpm 2.2 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 600 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 (Grinder side)	Water + Ceramic block
Wafer Cleaning Unit (Grinder side)	Water + brush, and spin/rinse dry station
Number of Cassettes	2 stations for each unit (Grinder & Polish unit)
Polish head Oscillation speed Head Load Pad size	3 Kw AC servo motor for 10 – 460 rpm 100 – 8,000 mm/min. 50 – 999 g//cm2 200mm O.D.
Polish table speed Vacuum Chuck material	3 Kw AC servo motor for 50 – 200rpm Alumina ceramics (dedicate size of wafer)
Chuck cleaning	Brush + Water
Wafer cleaning	N.C.W + DI water for Polish surface & Air blow spin dry

Specifications subject to change without notice.