Polish grinders

Grinder + CMP stress release High through put wafer handling 15umt wafer thickness in mass-producing

Overview of Tokyo Seimitsu Polish Grinders
To produce a wafer of the required thinness, the back surface of a wafer with a patterned surface covered by protective tape is finely finished with a grinder and polisher. As semiconductor wafer manufacturing demands thinner and thinner wafers, conventional grinders alone cannot meet production needs. Accretech’s PG series can polish extremely thin wafers, and, by attaching the RM, unload wafers by applying them to the dicing frame.
Various option

■ NCIG Non Contact Inprocess Gauge and Auto -TTV
Current Contact Type Gauge measures wafer thickness includes BG tape. BG tape has thickness variations and it may affect to Wafer Thickness Measurement. For example, if the BG tape’s Thickness Variation ± 5μm, and if wafer thickness is 25μm, then approximately 20% of variation may be resulted. Non-Contact In-process Gauge can measure only Silicon Wafer Thickness, So that BG tape Thickness Variation can be ignored. The wafer shape can be compensated by Auto-TTV function.

■ EGF (Extrinsic Gettering Function)
When the Grinding and Stress Relief is simultaneously processed from backside of wafer, the capturable layer is also getting reduced, and then the metal ion will be affected to transistor. Accretech provides the Extrinsic Gettering Layer by Texturing Process.
It enables achieving Gettering Function and Die strength for ultra thin wafer.

■ WCS (Wafer Cleaning System)
Accretech proposes various wafer cleaning systems for the device such as CMOS image sensor, LCD driver and TSV etc.

■ ML DICER Inline System (Integration System)
Accretech proposes integration system with ML dicer onto Polish grinder. Appling “GAL” process may users obtain 25 μm thickness chips without any defect.
ACCRETECH CONSUMABLE

- **Grinding Wheel**
  - TD2000K2-3W-5X-300
  - Segment Height 5 mm
  - Segment Width 3 mm
  - Resin Bond
  - K1: Hard Type
  - K2: Standard
  - K4: Soft Type
  - mesh size
  - Tokyo Seimitsu Diamond Wheel

- **Dressing Disk**
  - *TB325
  - *TB2000

- **Polishing Pad**
  - *TP200V4 (for PG200)
  - *TP300V4 (for PG300/PG3000)

- **Polishing Slurry**
  - *TS200L (Standard)
  - *TS200H (Low contamination)
  - *TS200S (High throughput)

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