Ceramics processing

(1)Cutting technology
Established fine-cutting techniques with wire saws and slicing machines for high accuracy.
(2)Grinding technology
Achieving circularity, cylindricality, and flatness of hard and brittle material at sub-micron level.
(3)Polishing technology
Capable of processing components to the nanometer level which require extremely flat planes with no surface roughness.

unit(mm)

Process	Material	Processable range note)	Feature	Example
Hole making Hole polishing	Ceramic Ruby etc.	Hole diameter Φ0.07～Φ4.00 (±0.002)mm	Accuracy of hole ・Dimensions ・Concentricity ・Circularity ・Cylindricality Roughness of hole surface	<Zirconia Capillary> <Alumina sleeve>
Cylindrical shape centerless grinding	Ceramic Ruby etc.	Φ0.5～Φ10.0 (±0.001)mm	Accuracy of cylindrical shape ・Dimensions ・Circularity ・Cylindricality	<Zirconia pin gauge>
Plane surface processing Lapping Polishing	Crystal Ceramic Glass etc.	Thickness of wafer 0.03～0.1 (±0.002)mm (at wafer size 10mm square)	Accuracy of Thickness	<Crystal wafer>
Cutting Wire saw	Crystal Glass	Thickness of wafer Φ0.1～10 (±0.005)mm (at wafer size 20mm square)	Small machining allowance Flatness	<Crystal wafer>

note) Please inquire details separately.

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