CERAMIC MECHANICAL ADVANTAGE

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LOOK INSIDE

MECHANICAL ADVANTAGE
For your lines.



Precision ceramics by Kyoto, up to 99.7% machining, customized manufacturing.

1 — Ceramic machining machine tools



1.1 — 3-Axis Vertical Machining Center
Machining: 3-axis vertical machining center
Spindle: 12,000 rpm, 15 kW, ISO 40 taper
Travel: 1,020 × 510 × 510 mm
Tool capacity: 24-station automatic tool changer
Accuracy: ±0.005 mm positioning, ±0.003 mm repeatability
Coolant: through-spindle and flood coolant, 70 bar
Control: Fanuc 0i-MF Plus
Weight: 4,200 kg
Footprint: 2,400 × 2,100 mm



1.2 — 5-Axis Simultaneous Machining Center
Machining: 5-axis simultaneous machining center
Spindle: 18,000 rpm, 22 kW, HSK-A63
Travel: 650 × 560 × 460 mm
Rotary axes: A ±120°, C 360° continuous
Tool capacity: 40-station chain magazine
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Siemens 840D sl
Weight: 6,800 kg
Footprint: 3,200 × 2,600 mm



1.3 — Horizontal Machining Center
Machining: horizontal machining center
Spindle: 10,000 rpm, 18.5 kW, ISO 50 taper
Travel: 1,250 × 1,050 × 1,050 mm
Pallet: 630 × 630 mm, 2 pallets
Tool capacity: 60-station chain magazine
Accuracy: ±0.004 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 11,500 kg
Footprint: 4,800 × 3,400 mm



1.4 — CNC Turning Center
Machining: CNC turning center
Spindle: 4,500 rpm, 30 kW, A2-8 chuck
Travel: 510 mm X, 1,020 mm Z
Tool capacity: 12-station turret
Accuracy: ±0.005 mm positioning, ±0.003 mm repeatability
Control: Fanuc 0i-TF Plus
Weight: 5,600 kg
Footprint: 2,900 × 1,800 mm



1.5 — Twin-Spindle Turning Center
Machining: twin-spindle turning center
Spindle: 4,500 rpm, 30 kW, A2-8 chuck
Travel: 510 mm X, 1,020 mm Z
Tool capacity: 12-station turret
Accuracy: ±0.005 mm positioning, ±0.003 mm repeatability
Control: Fanuc 0i-TF Plus
Weight: 5,600 kg
Footprint: 2,900 × 1,800 mm



1.6 — Swiss-Type Lathe
Machining: Swiss-type lathe
Spindle: 8,000 rpm, 5.5 kW, 20 mm bar capacity
Travel: 200 mm X, 310 mm Z
Tool capacity: 32-station live tooling
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Star SR-32J
Weight: 2,400 kg
Footprint: 1,600 × 1,200 mm



1.7 — Multi-Spindle Lathe
Machining: multi-spindle lathe
Spindle: 6 × 3,000 rpm, 3.7 kW, 25 mm bar capacity
Travel: 125 mm X, 200 mm Z
Tool capacity: 6 cross slides, 12 tools
Accuracy: ±0.005 mm positioning, ±0.003 mm repeatability
Control: Tornos MultiDeco
Weight: 3,800 kg
Footprint: 2,200 × 1,400 mm



1.8 — Gear Hobbing Machine
Machining: gear hobbing machine
Spindle: 2,000 rpm, 11 kW, hob arbor
Travel: 250 mm X, 300 mm Z
Tool capacity: single hob, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Liebherr LC 250
Weight: 9,200 kg
Footprint: 3,000 × 2,400 mm



1.9 — Gear Shaping Machine
Machining: gear shaping machine
Spindle: 1,500 rpm, 7.5 kW, cutter arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single cutter, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.10 — Gear Shaving Machine
Machining: gear shaving machine
Spindle: 3,000 rpm, 5.5 kW, shaving cutter arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single cutter, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.11 — Gear Honing Machine
Machining: gear honing machine
Spindle: 3,000 rpm, 5.5 kW, honing tool arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single tool, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.12 — Gear Grinding Machine
Machining: gear grinding machine
Spindle: 6,000 rpm, 7.5 kW, grinding wheel arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single wheel, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.13 — Gear Lapping Machine
Machining: gear lapping machine
Spindle: 1,500 rpm, 5.5 kW, lapping arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single lap, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.14 — Gear Deburring Machine
Machining: gear deburring machine
Spindle: 3,000 rpm, 5.5 kW, deburring tool arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single tool, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.15 — Gear Inspection Machine
Machining: gear inspection machine
Spindle: 3,000 rpm, 5.5 kW, inspection arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single probe, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.16 — Gear Testing Machine
Machining: gear testing machine
Spindle: 3,000 rpm, 5.5 kW, testing arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single probe, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.17 — Gear Assembly Machine
Machining: gear assembly machine
Spindle: 3,000 rpm, 5.5 kW, assembly arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single tool, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.18 — Gear Packaging Machine
Machining: gear packaging machine
Spindle: 3,000 rpm, 5.5 kW, packaging arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single tool, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.19 — Gear Shipping Machine
Machining: gear shipping machine
Spindle: 3,000 rpm, 5.5 kW, shipping arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single tool, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.20 — Gear Storage Machine
Machining: gear storage machine
Spindle: 3,000 rpm, 5.5 kW, storage arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single tool, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm



1.21 — Gear Tool Cart
Machining: gear tool cart
Spindle: 3,000 rpm, 5.5 kW, tool cart arbor
Travel: 200 mm X, 250 mm Z
Tool capacity: single tool, 4-position tailstock
Accuracy: ±0.003 mm positioning, ±0.002 mm repeatability
Control: Mitsubishi M850W
Weight: 8,500 kg
Footprint: 2,800 × 2,200 mm