

moore tool company

The Moore Tool Company, a leader in precision machine tool design and manufacture, produces a complete line of jig grinding machines and accessories.

The 500 is available in two models (CPZ and CPWZ) to address your specific ultra-precision requirements. These four- or five-axis, CNC-controlled jig grinding machines have continuous path contouring capability for complex two- and three-dimensional operations.

Features

- Base assembly providing expanded travels and increased stability
- GE Fanuc multi-axis CNC with customized touch screen-display

Productivity options

- Moore Autosize®
- Moore Autogrind
- Automatic tool changer (up to 12 tools)
- Automatic tool changer spindle
- Flood coolant system
- Machine enclosure
- Optional rotary table
- Air spindles:
 - 9,000 to 175,000 rpm (five spindles)
- Electric spindles:
 - 15,000 to 80,000 rpm (three spindles)
- Fire suppression system
- Vapor extraction system



Jig Grinder

500 Series

| Capacity | |
|------------------------------|-----------------------------------|
| Table working surface | 12.0 x 24.0 in. (305 mm x 610 mm) |
| Travel X longitude | 19.6 in. (500 mm) |
| Travel Y cross | 11.8 in. (300 mm) |
| Table top to wheel collet | 2.0 to 18.0 in. (50 mm to 450 mm) |
| Spindle housing travel | 13.8 in. (350 mm) |
| Quill travel Z vertical | 5.5 in. (140 mm) |
| Spindle angular adjustment | +/- 1.5 degrees |
| Grinding hole diameter range | .016 to 5 in. (0,4 mm to 127 mm) |

| Speeds and feeds | |
|--|-----------------------------|
| Traverse speed: X & Y axes | 80 in./min. (2,000 mm/min.) |
| Main spindle range | 2 to 300 rpm |
| Grinding wheel with air & electric heads | 6,000 to 175,000 rpm |
| Reciprocation @ 25 mm stroke length | 2 to 190 cycles/min. |

| Accuracy | |
|---|-------------------|
| Positioning: Step Gage | |
| Deviation in full travel: X & Y axes | 80 μin. (2,0 μm) |
| Positioning: VDI/DGQ 3441 | |
| Positional uncertainty P: W, X & Y axis | 80 μin. (2,0 μm) |
| Positional uncertainty P: Z axis | 160 μin. (4,0 μm) |
| Positional deviation Pa: W, X, & Y axis | 60 μin. (1,5 μm) |
| Positional deviation Pa: Z axis | 120 μin. (3,0 μm) |
| Contouring | |
| X, Y & C at 250 mm/min., measuring a 200 mm (8 in.) ring gage | 120 μin. (3,0 μm) |
| Geometric: Squareness | |
| Full travel: X to Y axes | 32 μin. (0,8 μm) |
| Spindle housing travel: X-Y plane | 80 μin. (2,0 μm) |
| Geometric: Alignment | |
| Total spindle travel: Parallelism of spindle centerline to column guideways | 80 μin. (2,0 μm) |

(All statements concerning accuracy are based on calibration temperature of 20 +/- 0.5 degrees C [68 +/- 1.0 degrees F])

**Accuracies guaranteed with complete remanufacturing only*



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