

## jig grinders

### H 500 CPWZ

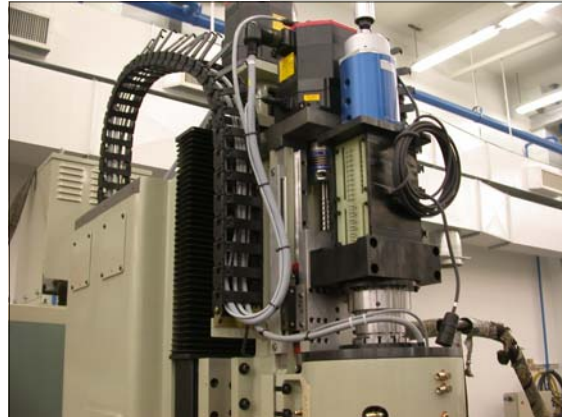
The Moore Tool Company, a leader in precision machine tool design and manufacture, produces a complete line of jig grinding machines and accessories. The H 500 CPWZ is available to address your specific ultra-precision requirements. This multi axis, CNC-controlled jig grinding machine has continuous path contouring capability for complex two- and three-dimensional operation. The hydrostatic spindle housing offers the highest level of accuracy available to date.

#### features

- | Base assembly providing expanded travels and increase stability
- | New column with increased stiffness
- | GE Fanuc 18i-MB multi-axis CNC with PC front-end
- | Hydrostatic main spindle for ultra round holes and contours

#### 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
- | Electric spindles - 15,000 to 80,000 rpm
- | Hydrostatic spindles - 40,000 to 120,000 rpm
- | Fire suppression system
- | Vapor extraction
- | High capacity robotic part loader



# specifications

## H 500 CPWZ

### Capacity

Table working surface	305 mm x 610 mm (12.0 x 24.0 inches)
Travel X longitude	500 mm (19.6 inches)
Travel Y cross	300 mm (11.8 inches)
Spindle housing travel	350 mm (13.8 inches)
Quill travel Z vertical	150 mm (6.0 inches)
Quill Diameter	100 mm (4.0 inches)
Taper Grind with U/Z Interpolation	20 Degrees
U axis travel	40 mm (1.574 inches)
Grinding hole diameter range	0,4 mm to 127 mm (0.016 to 5 inches)

### Speeds and feeds

Traverse speed: X & Y axes	2,000 mm/min. (80 in./min.)
Main spindle range	2 to 300 rpm
Grinding wheel with air, electrical & hydrostatic spindles	6,000 to 175,000 rpm
Reciprocation @ 25 mm stroke length	2 to 190 cycles/min.
Endpoint repeatability on Z axis reciprocation	<b>Optional</b> 5 µm (200 µin.)

### Accuracy

#### Positioning: Step Gage

Deviation in full travel: X & Y axes 1,5 µm (60 µin.)

#### Positioning: VDI/DGQ 3441

Positional uncertainty P: W, X, & Y axes 1,5 µm (60 µin.)

Positional deviation Pa: W, X, & Y axes 1,5 µm (60 µin.)

#### Error Motion of Main Spindle

Radial 0,25 µm (10 µin.)

Axial 0,25 µm (10 µin.)

#### Contouring

X, Y & C at 250 mm/min., measuring a 200 mm (8 in.) ring gage 2,0 µm (80 µin.)

#### Geometric: Squareness

Full travel: X to Y axes 0,6 µm (24 µin.)

Spindle housing travel: X-Y plane 1,5 µm (60 µin.)

#### Geometric: Alignment

Total spindle travel: Parallelism of spindle centerline to column guideways 1,5 µm (60 µin.)

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