

Machine Name : Tool grinder

Brand : WAIDA

Machine Model : AP460E

Stock No. : 813312

Ex-factory Date : 2012



Main Technical Parameters:

CNC Axis Configuration: 4-axis simultaneous control X/Y/B/C

X-axis: Radial feed of the grinding wheel

Y-axis: Grinding wheel reciprocating oscillation axis

B-axis: Workpiece rotary indexing axis, used to rotate the insert and sequentially grind each side

C-axis: Workpiece tilting axis, used to set the negative chamfer angle

CNC System Interface: Displays X/Y/B/C. The standard configuration has no Z-axis and uses 4-axis simultaneous control, not 5-axis control

Workpiece Range:

Insert Shapes: Square, triangular, rhombic, circular, and other types of indexable inserts

Insert Inscribed Circle Diameter: $\phi 3.97$ – $\phi 76$ mm

Maximum Insert Thickness: 90mm

Machining Materials: Cemented carbide, cermet, ceramic, PCD/CBN inserts

Grinding Wheel and Grinding Parameters:

Grinding Wheel: Diamond/CBN grinding wheel, original factory specification

ASD270-1/25D30

Grinding Wheel Spindle: High-rigidity structure with hydrostatic bearings and micron-level rotational accuracy

Grinding Wheel Dressing: Built-in automatic dressing function with adjustable dressing intervals and dressing counts

In-process Inspection: Equipped with a measuring probe for automatic dimensional inspection after grinding and automatic compensation for grinding wheel wear

Dimensional Accuracy: Peripheral grinding tolerance of ± 0.002 mm in batch production, with good edge consistency

CNC System:

CNC System: WAIDA proprietary CNC system

Insert Graphic Programming: Generates machining programs based on the input insert geometry parameters

Dimensional Control: Real-time dimensional measurement and automatic compensation

Production Management: Production counting and cycle time monitoring

Automation Configuration:

Automatic Loading/Unloading: Robotic loading and unloading system

Material Feeding: Pallet feeding system

Automation Capability: Supports long-term unmanned continuous production

Robot: Auxiliary automation mechanism, not included in the machine tool's four CNC servo axes

Overall Dimensions: Approximately 2300 × 1960 × 1950mm

Overall Weight: Approximately 6.5 tons



