

# CNC EXTERNAL CYLINDRICAL GRINDER



### MODEL & GRIND 200

## **Applications**





## YOUR IDEAL CHOICE FOR CYLINDRICAL GRINDERS

| e GRIND 200   | MAC  |
|---|--|
| High Production Three Axis Servo controlled cylindrical OD Grinding Machine designed for grinding medium to large production batches of small parts in plunge/traverse operations. <b>SALIENT FEATURES</b>  | CAPACITY<br>Swing Diameter<br>Grinding Diameter<br>ABC / Max grindin<br>Max weight of job                      |
| <ul> <li>One piece Cast Iron Box Structure for improved Static, Dynamic &amp; thermal characteristics.</li> <li>Wheel Spindle with Hydrodynamic Bearings for better Dynamic stiffness &amp; Damping. Precision Ball Bearings spindle also available as option.</li> <li>Cartridge type modular wheel spindle for easy maintenance.</li> </ul> | CARRIAGE (X<br>Slide stroke<br>Rapid feed rate(Or<br>Minimum increme<br>Feed servomotor t<br>Angle of approach |
| <ul> <li>Integrated Electrical cabinet and control panel to reduce the commissioning time – Plug &amp; Play Solution.</li> <li>Full Cover for safety of operator and environment.</li> <li>TPM Features.</li> <li>Automation with Gantry or Robot/s available as options.</li> </ul>  | TABLE (Z AXITable strokeRapid feed rateMinimum IncremeFeed servomotor t  |
| <ul> <li>Dressing system with Diamond disc or Diamond Roll available as options.</li> <li>WHEEL HEAD</li> </ul>   | WHEEL HEAD<br>Grinding wheel siz<br>Spindle motor pow  |
| <ul> <li>Straight &amp; Angular wheel configuration.</li> <li>45m/s grinding wheel surface speed for High Production &amp; efficient Grinding.</li> <li>IN-FEED SLIDE (X-AXIS)</li> </ul>   | Peripheral (surface<br>Spindle Bearing<br><b>WORK HEAD</b><br>Taper bore                                       |
| <ul> <li>Linear Bearing Guide ways for stick-slip free motion, high response &amp; Accuracy. (up to 0.1 μ)</li> <li>AC servo motor coupled with Ball screw for axis movement.</li> </ul>  | Spindle speed (AC<br>Spindle motor torc<br>Dresser   |
| TRAVERSE SLIDE (Z-AXIS)   | TAILSTOCK<br>Centre taper  |
| <ul> <li>Swiss scrapped V&amp; Flat Guide ways for stick-slip free motion &amp; longer life.</li> <li>AC servo motor coupled with Ball screw for axis movement.</li> </ul>  | Quill travel<br>Taper correction ra  |
| <ul><li>WORK HEAD</li><li>Timer Belt and pulley drive system for efficient transmission.</li></ul>  | Tank capacity<br>Motor power   |
| <ul> <li>Circularity on standard test piece &lt; 1.5µm. (less than 1 µ available as option)</li> <li>High Precision C-axis workhead available as option for form grinding.</li> <li>Direct coupled Servo workhead available as option.</li> </ul>   | GENERAL<br>Operation voltage<br>Machine weight   |

#### **TAIL STOCK**

- Clearance adjustment facility for quill movement. ٠
- Micro taper correction & hydraulic actuation facility available as options. •

#### **CNC SYSTEM**

Servo control through Fanuc/Siemens/Mitsubishi CNC. •

#### **OPTIONAL ACCESSORIES**

- In-Process Gauging System for plain and interrupted surfaces. •
- Automatic Dynamic Balancing system for grinding wheel.
- Automation with Gantry or Robot/s.
- Dressing system with (Diamond Roll).
- Length Positioning Device (Flagging) Active or Passive type.
- Gap Eliminator & Crash Detection through Acoustic sensor.
- Glass Scales for linear axes.

#### MACHINE SPECIFICATION OF & GRIND 200 RIPTION UNIT VALUES CITY Diameter 200 mm a Diameter mm 100 Max grinding length mm 250 eight of job between centers 30 kg IAGE (X AXIS) troke mm 160 eed rate(On Dia) m/min 10 m increment / Pulse (Feed Back Resolution) 0.0001 mm ervomotor torque Nm 8 0/30 of approach Dea E (Z AXIS troke m/min 420 eed rate m/min 10 Im Increment / Pulse 0.0001 mm ervomotor torque Nm 8 EL HEAD ASSEMBLY g wheel size (ODxWidthxID) 450 x 50 x 203.2 mm motor power(Induction type) kW 5.5 eral (surface) speed m/sec 45 Hydrodynamic (Ball Bearing) Bearing Type K HEAD ore No MT4 speed (AC Servo Motor) {infinitely variable} rpm 100-800 motor torque Nm 8 Blade (Diamond Disc/Roll) Type тоск MT3 No. taper 25 (40/80) avel mm correction range ±0.03 mm RAULIC UNIT 40 anacity l itre kW 0.55 power FRAI volts 415 ± 10 % AC 3 Phase

() Values in parenthesis indicate Optional Features/Accessories

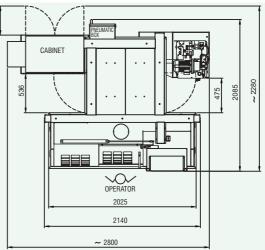
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Note:- Color shown in picture may not match with actual color due to printing limitations. Features & specification mentioned may vary & may not be a part of standard machine. All bracket values / items are optional at extra price.

Since continuous development is taking place, design and specifications are subject to change without prior notice and information.

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