Automatic Tool Changer
Electric Grinding Spindle

Technical Specification
INTRODUCTION

The Automatic Tool Changing (ATC) Electric Grinding Spindle was designed to be extremely compact and robust. It is capable of speeds ranging from 3,000 rpm to 60,000 rpm. Also, it will accept a full range of HSK-E 25 tool holders for grinding wheels and cutting tools as well as metrology equipment. The spindle is designed for pure production work with flood coolant directed at the cutting tool. It can be installed on our 500 and 1280 series Moore Jig Grinders with electric head capability. A flood coolant system / chiller unit would be required to cool the spindle and add cutting fluid to the work zone, not included.

SPINDLE DESCRIPTION

- Bearing Type: Hybrid Ceramic
- Continuous Spindle Power: 800 W / 1 HP
- Spindle Torque: 0,12 Nm
- Current: 3 Amps
- Lubrication: Air/Oil lubrication
- Spindle Speed: 3,000 to 60,000 RPM at 12,75 Ncm
- Spindle Length: 177 mm
- Spindle Diameter: 105 mm / Flange - 116 mm
- Spindle Tool Interface: HSK-E 25
- Radial Run-Out: 2 um (0.00080") at 50mm from spindle gauge line
- Taper Run-out: < 1 um
- Tool Weight: 0,5 kg max
- Weight: 8 kg
TOOLING DESCRIPTION

The ATC spindle accepts tool configurations compatible with HSK-E 25, plus metrology equipment. All tool holders are precision ground and balanced. The holders can be manually loaded and unloaded into the spindle. Maximum tool weight is 0.5 kg.

- Tool Holder
  - Mini (Polygonal Clamping)
    - P/N 104330 HSK E25 - Mini 1mm
    - P/N 104331 HSK-E25 - Mini 2mm
    - P/N 104332 HSK-E25 - Mini 3mm
    - P/N 104333 HSK-E25 - Mini 4mm
    - P/N 104334 HSK-E25 - Mini 5mm
  - RM (Polygonal Clamping)
    - P/N 104335 HSK-E25 - RM 3mm
    - P/N 104336 HSK-E25 - RM 4mm
    - P/N 104337 HSK-E25 - RM 5mm
    - P/N 104338 HSK-E25 - RM 6mm
    - P/N 104339 HSK-E25 - RM 8mm
    - P/N 104340 HSK-E25 - RM 10mm
    - P/N 104348 HSK-E25 - RM 0.125
    - P/N 104349 HSK-E25 - RM 0.250
    - P/N 104350 HSK-E25 - RM 0.375
  - Arbor Tooling
    - P/N 104166 Arbor, 50mm Extension Assembly
    - P/N 104167 Arbor, 75mm Extension Assembly
    - P/N 104168 Arbor, 100mm Extension Assembly

*Additional Tooling Upon Request

- Clamping Devices
  - P/N 104342 Full Range Clamping Device, Mini & RM
  - P/N 104343 RM Collet Aid
  - P/N 104344 Mini Collet Aid

- Measuring Equipment
  - P/N G500-610-500 Clamp Ring for Indicator Holder
  - P/N G500-660-31BM Renishaw OMP400
SYSTEM REQUIREMENTS   (Model 500/1280)

• Frequency Converter for electric grinding heads
• Machine Enclosure
• Flood / Spindle Coolant System
• Lubrication System
• Optional: 20 Position Automatic Tool Changer

NOTES

• The grinding spindle utilizes the cutting oil coolant system to cool the spindle.
• Dry Grinding: without spindle coolant up to 29,999 RPM.
• A coolant nozzle ring comes standard to flood the grinding and cutting tool.

GUARANTEE / WARRANTY

The Automatic Tool Changer Spindle is covered by a one-year warranty on parts and labor provided proper tools and techniques are used. Use of approved tool holders only, others will void warranty.

SERVICE


The Moore Tool Company, Inc. reserves the right to improve, change, or modify the construction of our products or their attachments, accessories, or any part thereof. This does not incur any obligation to make like changes on products or their attachments, accessories, etc. previously sold. All sales are subject to the standard terms and conditions of sale of Moore Tool Company, Inc. The specifications contained herein are subject to change without prior notification.