



## **MATRIX MODEL 5060 INTERNAL THREAD GRINDING MACHINE**

### **STANDARD FEATURES INCLUDE**

- |  |   |
|--|---|
| <b>Servo Motor Driven Work Head</b>                    | <b>Siemens 840DE CNC Control</b>        |
| <b>High Frequency Spindle Wheel Head</b>               | <b>Coolant Clarification System</b>     |
| <b>Manually Adjustable Helix</b>                       | <b>Centrifugal Separator</b>            |
| <b>Absolute Encoders fitted on all configured Axes</b> | <b>Magnetic Separator</b>               |
| <b>Pillar Mounted Dresser</b>                          | <b>Coolant Chiller System</b>           |
| <b>Remote Diagnostics</b>                              | <b>Totally Enclosed Hood</b>            |
| <b>1 x Diamond Dressing Media</b>                      | <b>Fume Extraction</b>                  |
| <b>1 x Grinding Wheel</b>                              | <b>Air Conditioned (ECC)</b>            |
| <b>1 x Hard Metal Quill</b>                            | <b>1 x Test Grind (Customer) Part</b>   |
| <b>Matrix ProfileMATE Software</b>                     | <b>Installation &amp; Commissioning</b> |

## TECHNICAL SPECIFICATION



### MATRIX 5060 CNC Precision Internal Thread Grinding Machine

#### Machine:

Max Diameter Swing	500 mm
Max Diameter Ground	400 mm
Min Diameter Ground Bore	16 mm
Max Length of Ground Bore	250 mm

#### Work Head: (C Axis)

Work Head Torque	154 Nm
Work Speed Range	0.4 to 120 RPM
C Axis Resolution	0.001°

#### Wheel Head:

High Frequency Spindle	5000 - 30000 RPM
Helix Capacity (A Axis)	± 12°

#### Wheel Head: (Z Axis)

Table Slide Travel	500 mm
Table Slide Position Resolution	0.0001 mm
Table Slide Traverse Speed	0 - 7 M/Min

#### Wheel Head: (X Axis)

Wheel Head Slide Travel	270 mm
Wheel Head Position Resolution	0.0001 mm
Wheel Head Slide Traverse Speed	0 - 7 M/Min

#### Wheel Dressing Unit:

Helix Capacity	± 12°
Variable Speed	0 ~ 6000 RPM (Bi-Directional)
Dressing Feed Rate	Programmable

#### Control System:

CNC System	Siemens 840 DE Control
System Specification	PCU50.3
User Interface	Siemens HMI Advanced Software
10.4" Colour TFT Screen	Resolution 640 x 480 Pixels
Operating & Programming	Matrix Advanced Programming

#### Machine - Physical:

Approx Gross Machine Weight	8000 Kg
Approx Machine Floor Area	4800 mm x 3800 mm

NOTE: These capacities are subject to inevitable restrictions, depending upon wheel head, Helix angle, Work Holding, and Support Equipment.