



MATRIX MODEL 3060 INTERNAL THREAD GRINDING MACHINE

STANDARD FEATURES INCLUDE

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

TECHNICAL SPECIFICATION



MATRIX 3060 CNC Precision Internal Thread Grinding Machine

Machine:

Max Diameter Swing	300 mm
Max Diameter Ground Bore	200 mm
Min Diameter Ground Bore	8 mm
Max Length of Ground Bore	100 mm

Work Head: (C Axis)

Torque Rating	154 Nm @ 120 RPM
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)	± 20°

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

Wheel Dressing Unit:

Work Head Mounted	Fixed
Variable Speed	0 ~ 6000 RPM (Bi-Directional)
Dressing Feed Rate	Programmable

Control System:

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

Machine - Physical:

Approx Gross Machine Weight	6500 Kg
Approx Machine Floor Area	3800 mm x 3500 mm

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