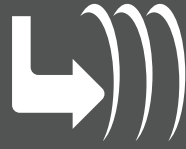


The Matrix 6950 -
Specifically designed for the precision grinding of long lead / high helix components it is extremely fast, accurate and remarkably easy to use.

The versatile 6950 embodies the latest advances in CNC & servo technology providing the dynamic performance and smooth running characteristics required for precision grinding applications.



internal thread grinding matrix 6950

High Helix

Features

- Electronic gearbox
- Programmable pitch-shift
- User friendly operator interface
- Ease of set-up
- High-Helix capability
- 5 Axis digital servo system.



Wheel Dressing

Twin-Axis, digital servo driven wheel dressing system for accurate profiling of complex thread forms



Control System

The 6950 has the latest in digital control system technology. The open architecture PCU runs with the Windows XP ProEmbSys operating system.

accuracy
innovation
service



matrix machine tool

Customer Driven – quality led,
Matrix Machine Tool (Coventry) Limited is a dynamic forward thinking company with a long history of delivering innovative solutions that enable customers to increase efficiency, improve productivity and produce exceptional results, quickly and easily.

internal thread grinding matrix 6950

| | |
|---|--|
| General | |
| Max recommended diameter of bore ground | 250 mm |
| Min recommended diameter of bore ground | 15 mm |
| Max recommended swing diameter | 330 mm |
| Max length of thread ground | 300 mm |
| Max component weight (incl. work holding) | 200 Kg |
| Max Helix angle | +/-12° |
| Pitch Range | 0 to 300 mm |
| Work Headstock (C Axis) | |
| Work speed range | 1 to 200 RPM |
| C Axis Position Resolution | 0.001° |
| Table slide (Z Axis) | |
| Longitudinal Slide Travel | 500mm |
| Z Axis Position Resolution | 0.001mm |
| Longitudinal Slide Traverse Speed | 0 – 5m/min |
| Wheel Headstock (X Axis) | |
| Wheel head Slide Travel | 270mm |
| Wheel head Slide Traverse Speed | 0 – 5m/min |
| Position Resolution | 0.001 mm |
| Dressing Unit (V & W Axes) | |
| Traverse Speed | 0 - 1 M/min |
| Radial Slide travel (V Axis) | 70mm |
| Cross Slide Travel (W Axis) | 40mm |
| Position Resolution | 0.001 mm |
| Motorised Diamond Disk | |
| Programmable Speed range | 0 – 3000 RPM (Bi-Directional) |
| High Helix Grinding Package | |
| Compound Approach Angle | Approach Angle Setting Blocks (0 to 6 deg) |
| Corrected Helix Angle | MATRIX Corrected Profile Post Processor |
| Control System Data | |
| CNC System | Siemens 840D |
| PC Operating System | Microsoft Windows XP ProEmbSys |
| 10.4" colour TFT screen | Resolution of 640 x 480 pixels. |
| Operating & Programming | MATRIX Advanced Programming System |
| Machine Physical | |
| Gross Machine Weight | 4570 Kg |
| Approximate machine floor area | 3500mm x 3500 mm |



**High
Helix**

High-Helix
Matrix correcting
profile generator
for long lead
applications



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