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In addition to our UK headquarters and USA facilities, Winbro Group Technologies has a number of partner companies strategically located to provide local sales and service support.

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Multi Axis, Single or Multi Hole High Speed EDM
Drilling System

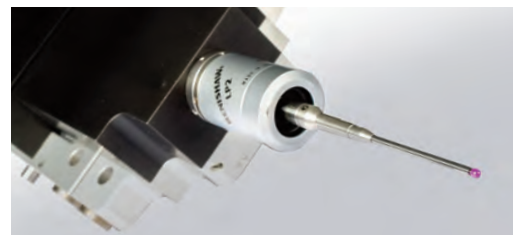
HSD6-III High Speed EDM Drilling System



HSD6-III

HSD6-III

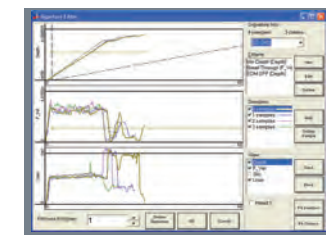
A robust design combined with multi-axis flexibility, useful work envelope and a choice of tooling.



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The HSD6 III High Speed EDM System offers industry leading performance whilst maintaining stringent aero and IGT metallurgical requirements. It can accommodate components dimensions of 225mm x 225mm x 225mm (8.85 x 8.85 x 8.85 inches) and with a payload of 10kg (22lbs).

Features

Signature analysis

- Monitors real time drilling performance
- Reduces the requirement for manual inspection

Advanced shaped hole generation

- Generation of complex 2D and 3D diffuser holes

High production rates

- Up to 5 times faster than conventional EDM

Hole geometry

- From 0.3mm to 3.0mm diameter and up to ~ 100mm in depth

Patented 6 point Probing System

- Allows positioning using simple fixturing
- Ensures accurate positioning of drilled holes

Optional on machine inspection

- Hole true position measurement using a laser opticator

Tooling

- Single point rotating or static electrode
- Single AEC (12 electrode automatic changing tool)
- Multi-tool with up to 45 individually sensed electrodes

Performance

Strokes

Linear X	200mm (7.87 inches)
Linear Y	200mm (7.87 inches)
Linear Z	250mm (9.84 inches)
Rotary A	+/- 185°
Rotary B	135° + 100°
Rotary C	+/- 8°
EDM axis:	100mm (3.94 inches)

Accuracy

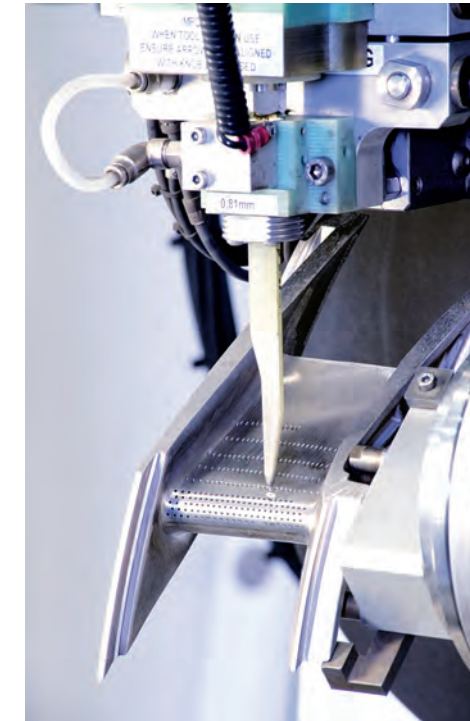
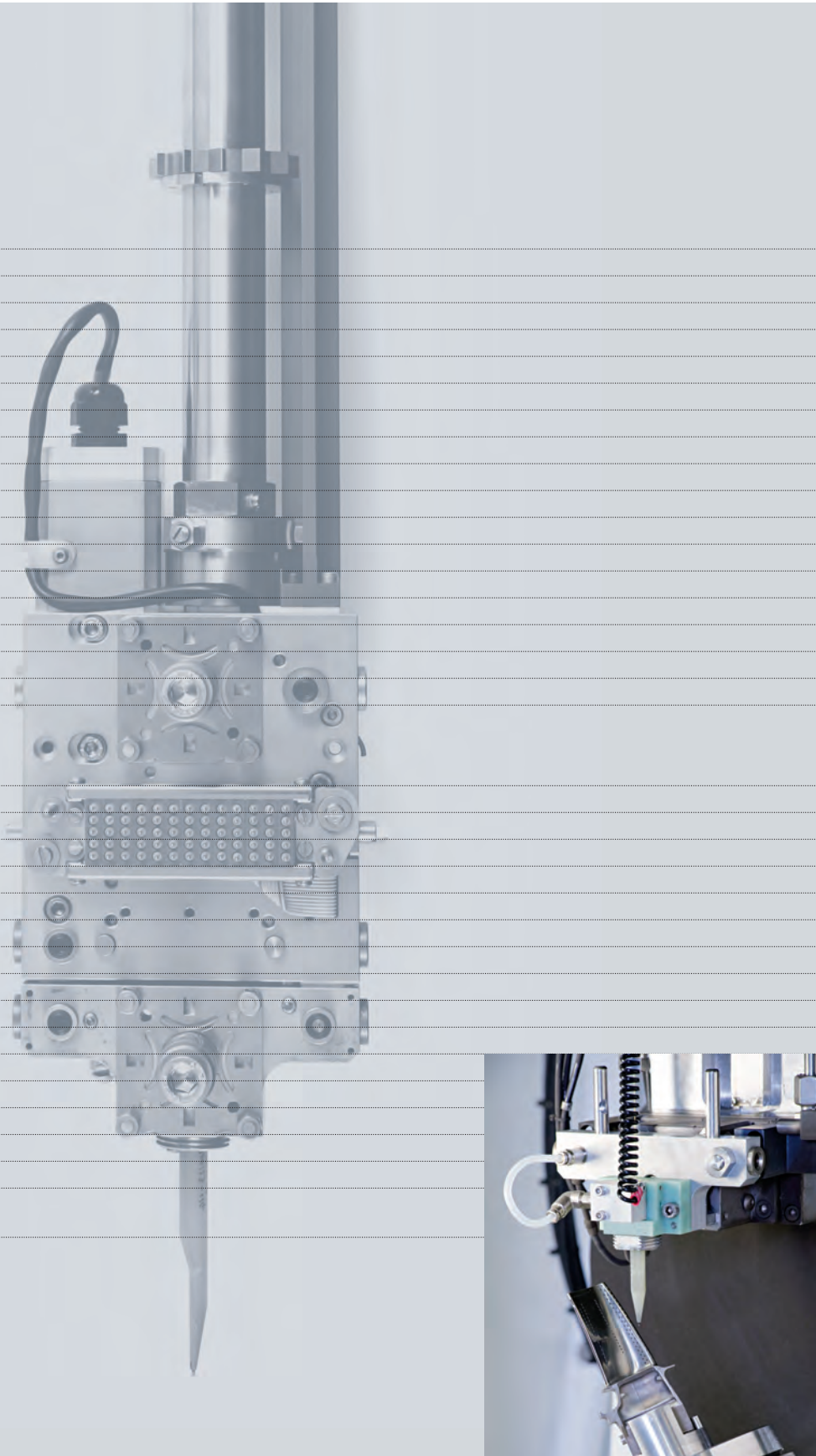
Linear	0.010mm (0.00039 inches)
Rotary	20 arc sec

Repeatability

Linear	0.008mm (0.00032 inches)
Rotary	+/- 15 arc sec

Applications

- The acclaimed HSD6 machine in its latest MK-III incarnation, has been specially developed for machining cooling holes and slots on Aero and IGT turbine blades, vanes, segments and other components of a similar size.
- Round holes/Shaped holes (oval)
 - Seal slots
 - 2D & 3D diffusers



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1. Renishaw probe
 2. Multipoint tool
 3. Signature analysis
 4. Single Point Drilling a nozzle guide vane
 5. Single Point Drilling a turbine blade