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**Accreditations:** 

AS9100 Rev D, BS EN ISO 9001:2015, BS EN 9100:2009



### **Flexible Machining Centres**



# Mitsubishi M-H5B with 72 pallet Fastem linear rack system

5x high speed horizontal machining centres, linked by a multi-level Fastems linear rack that holds 72 pallets. A centrally positioned stacker crane serves all 5 machines collecting and delivering pallets to and from any position on the 3-tier rack. A scheduling-type cell controller oversees all operating functions of the FMS. Continuous machining is aided by tool breakage detection.



#### Doosan DNM 650 (x2)

A flexible machining centre with a full  $\mathbf{4}^{\text{th}}$  axis.

Axis: (x) 1270 mm x (y) 670 mm x (z) 650 mm

80 Tool ATC

Maximum spindle speed:

12000 RPM

BT 40 spindle

30 tool ATC



#### Tsugami FMS 5 (x2)

A multi-pallet Flexible Machining Centre designed for high accuracy. Allows for continuous machining for two out of three shifts. Max. machining envelope:

Max. machining envelope: 500 mm x 500 mm x 500 mm Supports 8 pallets 126 Tool ATC



#### Mitsubishi M-H5B

A multiple pallet magazine supporting up to 8 pallets.
Continuous machining is aided by tool breakage detection.
Maximum work piece size:
800 mm x 760 mm
120 Tool ATC
500mm x 500mm work piece probing
Rapid traverse 40m/min
4 Axis



#### Mitsubishi M-H60E

A multi-pallet horizontal machining centre with 7 pallets supporting up to seven 7 fixtures. Offers true flexible machining 24/7.

Max. machining envelope:

1000 mm x 800 mm x 800 mm

80 Tool ATC

Maximum spindle speed:

. L2000 RPM

Pallet change time: 20 seconds (chip

o chip)



### Hitachi Seiki 500

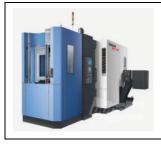
An 11-pallet flexible machining centre capable of running unmanned 24/7.

Max. workpiece size: 500mm x 500

mm

120 Tool ATC

Rapid traverse 45m/min



### Doosan HP 5100

Horizontal machining centre. Axis: (x) 850 mm x (y) 700 mm x (z) 750 mm

Max. spindle speed: 14,000 RPM 120 tool ATC

4-axis (twin pallet changer)

Our comprehensive range of multi-axis CNC machining facilities gives us the capability and flexibility to handle highly complex operations. We support manufacturing programs, across multiple industry sectors, that fully comply with global quality standards. Investments in new advanced technologies, engineering skills and tools that offer improved accuracy, reduced set-up times and high throughput rates deliver benefits that are passed on to our customers. We machine, treat fabricate and assemble a wide range of materials, including aluminium, steel, stainless steels, copper, brass, titanium,

## **5 Axis Milling Machining Centres**



### Matsuura M72-35 V

A high speed 5-axis machining centre with a 36-pallet automated workpiece loading system. Designed for long periods of unmanned 5-axis simultaneous productivity. 320 tool magazine Max. spindle speed: 15000 RPM Advanced tool management



#### Matsuura MX-520

system

A high speed 5-axis machining centre with a 4-pallet automated workpiece loading system.

Designed for unmanned 5-axis machining and easy accessibility 90 tool magazine

Max. spindle speed: 12000 RPM Advanced tool management

### **Sheet Metal Equipment**



Promecam Press Brake Haegar Insert Press Edwards 3.25 Truecut Guillotine

# **Inspection Equipment**



# DEA Scirocco-nt Brown and Sharpe

Measuring Capacity 900 x 1400 x 700

Measurement accuracy: 5 + 6L / 1000

Repeatability: 2  $\mu m$ . Resolution: 0.5  $\mu m$ 



### **DEA Mistral Slout Bridge**

Measuring Capacity 1000 x 660 x 660 Measuring Accuracy: 4.5 + 5L / 1000



# CE Johansson Micro-Hite 3D CMM

Measuring Capacity 440 x 490 x 390

Measurement accuracy 3 + 4L / 1000

Repeatability:  $3.5\ \mu m$ 



### Midland Metrology JT12 AZ Shadowgraph

300mm diameter screen and angular measurement, 200mm x 100mm movement work stage with digital display