

# QUALITY | PRECISION | SERVICE

## Flexible Machining Centres



Mitsubishi M-H5B with 72 pallet Fastem linear rack system 5x Mitsubishi high speed horizontal machining centres are linked by a multi-level Fastems linear rack system, which holds 72 pallets. A centrally positioned stacker crane serves all 5 machines collecting and delivering pallets to and from any position on the three tier rack. A scheduling-type cell controller oversees all operating functions of the FMS. Continuous machining is aided by Tool breakage detection.



#### Mitsubishi M-H5B

A multiple pallet magazine supporting up to 8 pallets. Continuous machining is aided by tool breakage detection. Basic specifications:

Maximum work piece size - 800 mm x 760 mm
120 Tool ATC
500 mm x 500 mm work piece probing
Rapid traverse 40m/min



#### Mitsubishi M-H60E

4 Axis

A multi-pallet horizontal machining centre with seven pallets supporting up to seven separate fixtures. Offers true flexible machining 24/7. Basic specifications: Max. machining envelope:  $1000 \text{ mm} \times 800 \text{ mm} \times 800 \text{ mm}$ 

Maximum spindle speed: 12000 RPM

Pallet change time: 20 seconds (chip to chip)



#### Doosan DNM 650 (x2)

A flexible machining centre with a full 4th axis. Basic specifications:

Axis: (x) 1270 mm x (y) 670 mm x (z) 650 mm Maximum spindle speed: 12,000 RPM BT 40 spindle

30 tool ATC

## **Machining Centres**



#### Fadal VMC 4020

A vertical machining centre with a 30 tool turret and Renishaw work probing. Basic specifications: Table size: 1016 mm x 508 mm x 711 mm Maximum spindle speed: 10,000 RPM



#### Tsugami FMS 5

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

Max. machining envelope: 500 mm x 500 mm x 500 mm Supports 8 pallets

126 Tool ATC



#### Fadal VMC 3016

A vertical machining centre with a 30 tool turret and Renishaw work probing. Basic specifications: Table size: 762 mm x 406 mm x 508 mm Maximum spindle speed: 10,000 RPM 4 Axis



#### Tsugami FMS 3

A multi-pallet Flexible Machining Centre that is ideal for the company's smaller work. Includes all the features of the FMA5. Basic specifications:

Max. machining envelope: 300 mm x 300 mm x 250 mm Supports 11 pallets 126 Tool ATC



#### Cincinnati Sabre 750

A vertical machining centre with a 27 tool turret. Basic specifications:

Working area: 760 mm x 510 mm Maximum spindle speed: 10,000 RPM



### Hitachi Seiki 500

An 11 pallet Flexible Machining Centre capable of running unmanned 24/7. Basic specifications:
Max. work piece size: 500 mm x 500 mm
120 Tool ATC
Rapid traverse 45m/min



#### Doosan HP 5100

A horizontal machining centre.
Basic specifications:
Axis: (x) 850 mm x (y) 700 mm x (z) 750mm

Axis: (x) 850 mm x (y) 700 mm x (z) 750mm Maximum spindle speed: 14,000 RPM 120 tool ATC

4 Axis (twin pallet changer)



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## **Machining Centres**



#### Puma 700 LM (x2)

A large capacity, high productivity CNC turning centre.

Basic specifications:

Max. turning diameter: 900 mm Max. turning length: 3200 mm

Spindle RPM: 1500 Swing capacity: 1030 mm

### **Sheet Metal Equipment**



#### Strippit 100R

22 tonne punch press. Basic specifications: Working area: 1250 mm x 1000 mm

Punch rate: 200 Hits per minute: 400 20 tool (2 with auto index)

### **Profile Machine**



#### Flow Mach3B 1313b Water Jet Machine

This waterjet cutting machine is equipped with ultra pierce and full 3D dynamic contour control for increased performance and accuracy. Basic specifications: Max. machining envelope: 1300 mm x 1300 mm 4000 bar cutting pressure will cut almost any material up to a thickness of 190mm to within +/- 0.05mm

## **Inspection Equipment**



#### LK CMM G-90C

A vertical spindle with moving ceramic bridge CMM machine. The machine works on high efficiency air bearings and has a granite surface plate base with bonded straight edge. In common with the Merlin, this machine is automated but benefits from a larger working surface. Basic specifications:

Working surface: 100 mm x 700 mm x 600 mm

## **Sheet Metal Equipment**



#### **Promecam Press Brake**

50 tonne press brake. Basic specifications: Bed length: 2 metres



### Mitutoyo B241

CMM Co-ordinate measuring machine. Basic specifications:

Working surface: 800 mm x 1500 mm

Traverse: (x) 700 mm x (y) 1000mm x (z) 450 mm



### **Edward Pearson Press Brake**

50 tonne press brake. Basic specifications: Bed length: 3.1 metres



#### **Haegar Insert Press**

8 tonnes of ram force. Basic specifications: Throat depth: 24 inches



### CE Johansson Micro-Hite 3D CMM

Small co-ordinate measuring machine with PC-DMISTM software to automatically collect and analyse measurement data. Basic specifications: Work capacity: (x) 600 mm x (y) 750 mm x (z) 430 mm



## **Promecam Press Brake**



AS9100 REV C, ISO 9001:2008, BS EN 9100:2009 2008 'Best Machining' MWP Award Winner



#### Basic specifications:

2 metre up stroke

#### Precision Machining - Vertical & Horizontal Sheet Metal Large CNC Turning Waterjet Cutting Zinc Phosphating

Wet Paint

Powder Coating Ultrasonic Cleaning MIG & TIG Welding

Chemical Etching Bead Blasting Xylan Coating

Vapour Blasting Assembly & Test

## **Materials**

We machine, treat, fabricate and assemble a large variety of materials, including but no limited to: Aluminium, Steel, Stainless Steels, Titanium, Magnesium and Plastics

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