



# Equipment List.

TCR Machining Ltd. implements the latest advanced technologies in their climate controlled facilities. If you require detailed information on the capability and capacity of any piece of equipment please contact us directly.

## ■ CNC Machines

### MATSUURA MAM72-42V PC2: 5-AXIS VERTICAL MACHINING CENTER



- New in 2011
- Multi pallet 5 axis machine tool
- X-Axis Travel: 520 mm(20.47 in.)
- Y-Axis Travel: 730 mm(28.74 in.)
- Z-Axis Travel: 510 mm(20.07 in.)
- A-Axis Travel: -110~+10°
- C-Axis Travel: 360°
- Working Surface: 300 x 300 mm (11.81 x 11.81 in.)
- Maximum Loading Capacity: 200 kg (441 lbs.)
- Maximum Work Size: 420 x H350 mm (16.53 x H13.77 in.)
- Maximum Spindle Torque: 167 Nm / 630 min<sup>-1</sup>
- Spindle Speed Range: 40~20,000 min<sup>-1</sup>
- Rapid Traverse (X/Y/Z): 50,000 mm/min (1,968.5 ipm)
- Rapid Traverse (A/C): 30/50 min<sup>-1</sup>
- Rapid Feed Acceleration (X/Y/Z): 0.89 / 0.9 / 1.12 G
- Rapid Feed Acceleration (A/C): 1,730 / 4,054 deg/sec<sup>2</sup>
- Minimum Movement Increment (X/Y/Z): 0.001 mm (0.000039 in.)
- Minimum Movement Increment (A/C): 0.001°
- 1000 psi thru spindle coolant
- Maximum tool storage capacity: 240
- Renishaw laser & probe system



### NAKAMURA-TOME SC-200L MYS TURNING CENTRE WITH SUB SPINDLE AND BAR FEEDER

- New in 2011
- C-Axis and Y-Axis
- Thru Spindle Bar Capacity: 65 mm
- Maximum Turning Length: 530 mm
- Maximum Turning Diameter: 410 mm
- Distance Between Center: 509 mm
- Chuck Size: 8 in.
- Sub Spindle Speed: 6,000 min<sup>-1</sup>

### **AMERA-SEIKI TC-2L CNC LATHE WITH BAR FEEDER MAGAZINE**

- Maximum Turning Diameter: 8 in.
- Maximum Turning Length: 24 in.
- Diameter thru Spindle bar Capacity: 2 in.
- 3-Jaw, 2-Jaw and Collet Chuck

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### **HARDINGE ELITE II 8/51**

- Maximum Turning Diameter
- Thru Spindle: 2 in.
- C-Axis, Sup Spindle and Live Tooling

### **DOOSAN REVO 3020**

- Vertical Machining Center
- Full 4-Axis Capability
- X-Axis Range: 32 in.
- Y-Axis Range: 20 in.
- Z-Axis Range: 20 in.
- 10,000 RPM Belt Driven

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### **BRIDGEPORT VMC 760**

- Vertical Machining Center
- Full 4-Axis Capability
- X-Axis Range: 30 in.
- Y-Axis Range: 20 in.
- Z-Axis Range: 24 in.
- 12,000 RPM Geared Spindle
- Thru Spindle Coolant

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## **■ Conventional Equipment**

- Katsowin A2 Fully Automatic Bandsaw
- Chevalier FSG-618M Surface Grinder
- First "Bridgeport" Type Knee Mill
- Megamat Storage System
- Zeiss CMM

## **■ Software**

- SolidWorks
- MasterCam X6
  - Lathe Level 1
  - Mill Level 3
  - Multiaxis
- CamPlete
  - True Path V4
- E2 Shop Floor Control System



**CUSTOM & PRODUCTION CNC MACHINING**  
AS9100 / ISO 9001