CNC Machining Capabilities

5 Axis Machines

- 2 X HURCO VMX60SR FULL 5 AXIS MILLING MACHINE
  - Swivel Head and Rotary Table
  - Tool Probing
  - Travel 1520mm x 660mm x 610mm (X x Y x Z)
  - 12000 RPM spindle

- NAKAMURA SUPER NTJX(L) TWIN CHUCK TURN/MILL MACHINE
  - Swivel Head 5-AXIS capability
  - 1500mm multi load bar feed
  - 65mm bar capacity through spindle
  - Larger parts can be machined by hand loading
  - 245mm max turning diameter.

Turn/Mill CNC Machines

- NAKAMURA NTY3 TWIN SPINDLE MULTI-AXIS CNC TURNING CENTRE
  - Opposed two-spindle, 3-turret construction
  - 72 tool stations
  - 36 driven tool stations
  - 62mm Y-axis on 3-turret
  - 6000 rpm spindle

- NAKAMURA WT300 TWIN CHUCK TURN/MILL MACHINE
  - 1500MM multi load bar feed
  - 80mm bar capacity through spindle
  - Larger parts can be machined by hand loading
  - 270mm max turning diameter

- NAKAMURA WT150 TWIN CHUCK TURN/MILL MACHINE
  - 1000MM multi load bar feed
  - 2” bar capacity through spindle
  - Larger parts can be machined by hand loading
  - 190mm max turning diameter

- NAKAMURA WT100 TWIN CHUCK TURN/MILL MACHINE
  - Full length multi load bar feed
  - 42mm bar capacity through spindle
  - Larger parts can be machined by hand loading
  - 190mm max turning diameter

- DAEWOO PUMA 400
  - Lathe with live tooling
  - 117mm diameter spindle bore capacity
  - 500mm diameter x 800mm long turning capacity

- TORNOS SIGMA 20 SLIDING HEAD TURN/MILL MACHINE
  - Full length multi load bar feed
  - 25mm bar capacity through spindle

- STAR SR32J SLIDING HEAD TURN/MILL MACHINE
  - Full length multi load bar feed
  - 32mm bar capacity through spindle

- NAKAMURA AS-200 SINGLE CHUCK TURN/MILL MACHINE
  - 1500MM multi load bar feed

All dimensions in millimetres unless otherwise stated
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CNC Milling

- HURCO VMX64t-24 ATC MACHINE CENTRE
  - Swivel head and rotary table
  - Travel 1625 x 863 x 762)
  - 1200 rpm spindle
- DOOSAN HP5100
  - Twin Pallet Horizontal Machining Centre
  - Machining Capacity 850 x 700 x 750mm (X x Y x Z)
  - Maximum Work Piece Weight 500Kg
  - 60 Tool Change Carousel
- 2 x MITSUBISHI M-V5C
  - High Speed Vertical Machining Centre
  - Fanuc 18i MA CNC Control
  - Machining Capacity 800 x 510 x 460mm (X x Y x Z)
  - Loading Capacity 500Kg
- HURCO VMX30
  - High Speed Vertical Machining Centre
  - Ultimax Control
  - Machining Capacity 760 x 500 x 600mm (X x Y x Z)
  - 4th Axis
- HURCO VM1
  - High Speed Vertical Machining Centre
  - Ultimax Control
  - Machining Capacity 660 x 400 x 500mm (X x Y x Z)

CNC Turning

- COLCHESTER 300 CNC LATHE
  - 82mm Bar Capacity with Bar Feed
  - Collet Chuck Capacity
  - 3" Diameter and 10" Chucking Capacity
- HARDINGE CNC LATHE
  - 2" Bar Capacity
  - 8" Chuck

Manual Machines

Milling

- 3 X BRIDGEPORT TURRET MILLS

Turning

- BINNS & BERRY TRIDENT 1000 CENTRE LATHE
  - 1500mm Swing Diameter
  - 2500mm Between Centres
  - Loading Capacity 1000Kg
- POREBA CENTRE LATHE
- 940mm Swing Capacity
- 2200mm Between Centres
- Loading Capacity 1000kg

- **2 X COLCHESTER MAGNUM CENTRE LATHE**
  - 1060mm Swing Diameter
  - 1500mm Between Centres
  - Loading Capacity 500kg

- **COLCHESTER MASTIFF CENTRE LATHE**
  - 800mm Swing Diameter
  - 2000mm Between Centres
  - Loading Capacity 350kg

- **VARIOUS OTHER TOOL ROOM LATHE**

### Other Machines and Equipment

#### Inspection Equipment

- **MITUTOYO CNC CMM**
  - Model Euro-Apex-7106
  - GEOPAK-GEOWIN software
  - Measuring range 700 x 1000 x 600mm (X x Y x Z)
  - Automatic stylus change with PH9 motorised probe head

- **MITUTOYO CMM**
  - Model B231
  - GEOPAK 3 Version 3.2 software

#### Testing Facilities

- **2 X BOC HELIUM LEAK DETECTORS**
  - Sniffer Probe Linked to either Leak Detector / Pressure Testing / Thermal Cycling / Transfer Line Efficiency / Flow Testing (to Customer Specifications)
  - (Max Temperature 110 degrees Celsius)-(Vacuum < 1 x 10^{-7} Mbar)

#### Metal Finishing/Cleaning Facilities

- ULTRASONIC TANK
- ALCOHOL DEGREASING TANK
- LINISHING MACHINE
- POLISHING MACHINE

#### TIG Welding

- 1 X MILLER Syncrowave 250AC/DC TIG
- 1 X KEMPPI MASTER TIG MLS2500
- 1 X KEMPPI MASTER TIG MLS2300
- 2 X ROTATABLE CHUCK WITH A 2.5" BORE
  - The tables are adjustable to operate vertically as well as horizontally.

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