

# **CNC Machining Services**

## **Facilities List**

## Jobbing

We will make your machined parts and can reverse engineer them if your drawings are not current.

- Volume manufacturing
- CNC manufacturing
  - Precision honing
- Precision manufacturing
  - CNC metal machining
- Precision micro machining

## Rapid Prototyping

Make one or a small quantity of items from a basic sketch or your CAD drawing.

## Programming - Engineering

We will create the most efficient CNC programs for making your part, which ensures minimized costs. We can work from your 2D / 3D CAD files.

## Design

It is much easier to design cost out than attempt to cost reduce an existing design. We will work with you to ensure the cost of making your new part is as low as it can be. And if we do not have the resources to execute we will tell you so you can engage with other suppliers. That's the value of Partnership.

## Contract Manufacturing

We can assemble your items into sub assemblies or completed products. Ask for a quote.

## Materials

We have experience in many materials including:

- Titanium machining
- Stainless steel machining
  - Brass machining
  - Copper machining
  - Ceramic machining
- Engineering polymer machining
  - PEEK
  - Delrin
  - Kovar
  - etc

# Part of Our Facilities

## CNC Milling

We have a wide range of CNC milling machine tools that allows us to handle any job. In addition to our Vertical Machining facilities, our precision milling machines include the latest in horizontal milling technology with our Matsuura precision milling machine.

### CNC VERTICAL MACHINING CENTER [MAKONO V33I](#)

650\*450\*350 mm 4AXIS

20000 RPM

Tolerances down to +/-0.0002 in(0.005mm)





## CNC VERTICAL MACHINING CENTER **MAKINO V56I**

900\*550\*450 mm 4AXIS

20000 RPM

Tolerances down to +/-0.0002 in(0.005mm)



## CNC VERTICAL MACHINING CENTER **MAKINO V80S**

1300\*1000\*600 mm 5AXIS

20000 RPM

	<b>V80S</b>
Travel X/Y/Z (mm)	1300x1000x600
Travel A/C (°)	-30~+30/-60~+60
Max. part size(mm)	1500x1200x550
Max. table load (Kg)	2500
Spindle (RPM)	20,000
Rapid feed (m/min)	58
Cutting feed (m/min)	40

# CNC Turning

We have a range of CNC lathes capable of handling up to 4" bar.  
Our largest CNC lathe can turn a 30 inch diameter part.  
We offer precision turning in metal and plastic.



19"  
Color LCD  
Touch Panel

NT  
Smart  
X



T<sub>x2</sub>  
Double turret

M<sub>x2</sub>  
Double Milling Motor

Y<sub>x2</sub>  
Double Y-axis

S<sub>x2</sub>  
Twin-Spindle

C<sub>x2</sub>  
C-axes

Capacity		φ42mm	φ51mm (op.)	φ65mm (op.)
Max. turning diameter / Max. turning length	12st.	175mm / 588mm	200mm / 570mm	
	15st.		190mm / 570mm	
Distance between spindles		max. 820mm / min. 200mm		
Bar capacity		φ42mm	φ51mm	φ65mm
Chuck size		165mm (6")		

Axis travel				
Slide travel (X1 / X2)	12st.	150mm / 135mm	150mm / 141mm	
	15st.	130mm / 130mm		
Slide travel (Z1 / Z2)	12st.	588mm / 560mm	570mm / 560mm	
	15st.	570mm / 560mm		
Slide travel (Y1 / Y2)	12st.	±42mm / ±32.5mm		
	15st.	±31mm / ±31mm		
Slide travel (B)		620mm		

Spindle L, R				
Spindle speed		6,000min <sup>-1</sup>	5,000min <sup>-1</sup>	4,500min <sup>-1</sup>
Spindle motor output (L / R)		11/7.5kW	11/7.5kW	15/11kW (op.)
Spindle motor torque (L / R)		76/39N·m	77/39.4N·m	85/43N·m

Turrets				
Number of turrets		2		
Driven-tool spindle speed		6,000min <sup>-1</sup> (op. 8,000min <sup>-1</sup> Only for 12-station turret)		
Drive motor		7.1/2.2kW (op. 5.5/2.2kW)		
Type of turret head / Number of indexing pos.	12st.	Dodecagonal drum turret / 24		
	15st.	15-station turret / 15		
Drive type / Number of driven-tool stations	12st.	Individual rotation / 12		
	15st.	Individual rotation / 15		

General				
Floor space (LxWxH)		3,424mm × 2,257mm × 1,930mm		
Machine Weight (incl.control)		8,500kg		

Bar Capacity and spindle motor configurations				R Spindle motor							
L Spindle motor	Bar capacity	Spindle motor output		φ42		φ51		φ65			
		11/7.5kW	6,000min <sup>-1</sup>	11/7.5kW		15/11kW		11/7.5kW		15/11kW	
				5,000min <sup>-1</sup>		4,500min <sup>-1</sup>					
φ42	11/7.5kW	6,000min <sup>-1</sup>	○	○	○	○	○	○	○	○	
			○	○	○	○	○	○			
	15/11kW	5,000min <sup>-1</sup>	○	○	○	○	○	○	○	○	
			○	○	○	○	○	○			
φ51	11/7.5kW	5,000min <sup>-1</sup>	○	○	○	○	○	○	○	○	
			○	○	○	○	○	○			
φ65	11/7.5kW	4,500min <sup>-1</sup>	○	○	○	○	○	○	○	○	
			○	○	○	○	○	○			

As you like...

Innovation  
Technology

~ Creation of new values ~

# MX-100

State-of-the-art, compact high-precision Multitasking Machine, with the capabilities of a Machining Center and a Turning Center, featuring advanced software, smart features and up to 96 tools, to ensure high-productivity machining of a wide range of parts, and to smartly meet the needs of various manufacturing sectors.

- Milling-Y-axis standard
- ATC tool spindle standard
- ATC tool spindle motor 11/7.5kW  
Spindle speed 12,000min<sup>-1</sup> (op. 20,000min<sup>-1</sup>)
- ATC storage capacity 36 tools (op. 48, 72 tools)
- X-axis travel up to 50 mm below spindle center.  
Y axis travel ± 105 mm with respect to the spindle center
- Floor space 4,350mm x 2,795mm
- Lower turret milling motor power 7.1/2.2 kW  
with Max. speed 6,000 min<sup>-1</sup>
- Eco-friendly: Grease lubrication of slide axes.
- Advanced software and Smart features.



# Swiss Screw Machining

Unrivaled in the area is our Swiss machining capability.

We are the go to Swiss screw machine shop.

We have 4 Swiss screw machines for your precision screw machining work.



Our Swiss screw machines allow us to offer specialized automated production of small parts in high volume.

With 20 sets Cincom Citizen L20s complete with CAV20L-IS feeders we have a capability unrivalled in the area.

Tolerances down to +/-0.0002 in(0.005mm)





Cincom Citizen M32

**Ultimate Gang + Turret**

Front Spindle

Main spindle speed : 8000min-1

Motor : 5.5/7.5kw

Max. machining length (L) :  
320mm/1chucking (GB)

Back Spindle

Back spindle speed: 8000min-1

Motor : 5.5/7.5kw

Tolerances down to +/-0.0002 in(0.005mm)