

## HOLBRO ENGINEERING LTD – CAPACITY LIST

We work as part of your team to genuinely understand your business, your production processes and component requirements, delivering the best service from concept to completion.

Our Capabilities include:

<b>CNC TURNING</b>	<b>KITTING OF COMPONENTS</b>
<b>CNC FOLDING</b>	3D SCANNING
<b>CENTRE LATHE TURNING</b>	3D PRINTING
<b>CNC MILLING</b>	SUB ASSEMBLING KITS AND COMPONENTS
<b>VERTICAL MILLING</b>	REPAIRS TO ORIGINAL OEM SPECIFICATION
<b>HORIZONTAL MILLING</b>	RETROFIT TO ORIGINAL OEM SPECIFICATION
<b>BORING, SLOTTING &amp; DRILLING</b>	ELECTRIC BENCH MOUNTED RESISTANCE WELDING
<b>GRINDING – CYLINDRICAL/SURFACE</b>	SPARK ERODING
<b>FITTING – SUB ASSEMBLY WORK</b>	BRAZING
<b>LASER PROFILING/CUTTING</b>	POWDER COATING
<b>FABRICATION</b>	PAINTING
<b>PROTOTYPE WORK</b>	ZINC PLATING
<b>CAD/CAM WORKSTATIONS</b>	ANODISING
<b>INSPECTION (CMM INSPECTION)</b>	MOULDINGS

### CNC TURNING

MACHINE	MAX DIA (MM)	MAX LENGTH (MM)
DOOSAN PUMA 280M	410	1030
DOOSAN PUMA 400MB	550	2100
COLCHESTER TORNADO T8M	390	540

### CENTRE LATHE TURNING

MACHINE	MAX DIA (MM)	MAX LENGTH (MM)
COLCHESTER MASTIFF	800	1400
COLCHESTER STUDENT	300	1000
COLCHESTER MASTIFF	554	2000
COLCHESTER MASCOT 2000	460	1500

### CNC MILLING

MACHINE	X (MM)	Y (MM)	Z (MM)	NO OF AXIS
DOOSAN DNM 650	1270	670	625	4 & 5
BRIDGEPORT VMC 800	800	510	450	3
QUASER MV 184	1000	500	700	4 & 1
BRIDGEPORT VMC 560	540	410	480	3

### MANUAL MILLING

MACHINE	
TURRET MILL MACHINES (X2)	COMPLETE WITH ELECTRICAL READOUTS
CINCINNATI MILACROM HORIZONTAL MILLER	

### MILLING, SLOTTING AND DRILLING

MACHINE	TABLE
BRIDGEPORT TURRET MILL	48" X 9"
CHESTER TURRET MILL	54" X 10"

### SPARK ERODING

MACHINE
CHARMILLES ISOPULSE P25

### GRINDING – CYLINDRICAL/SURFACE

MACHINE	MAX SIZE (MM)
JONES & SHIPMAN 1430 SURFACE GRINDER	600 X 300

### LASER PROFILING/CUTTING

Our laser cutting office has the capability to cut a wide range of metals with a variety of thickness.

MACHINE	WORKING RANGE XxYxZ (MM)	POWER	MAX AXIS (M/MIN)	CUTTING THICKNESS
AMADA LCG-AJ SERIES	3070 X 1550 X 100	4000 W	170	-
AMADA LCG-AJ MILD STEEL	-	-	-	20MM
AMADA LCG-AJ STAINLESS STEEL	-	-	-	18 MM
AMADA LCG-AJ ALUMINIUM	-	-	-	16 MM
AMADA LCG-AJ BRASS	-	-	-	10 MM
AMADA LCG-AJ COPPER	-	-	-	8 MM
AMADA LCG-AJ TITANIUM	-	-	-	10 MM

### INSPECTION (CMM INSEPTION)

Our inspection department is run by experienced and qualified staff with the help of a CMM measuring machine linked to a database running state of the art software.

MACHINE	X (MM)	Y (MM)	Z (MM)	RESOLUTION
NIKON ALTERA 8.7.6	813	710	610	0.05um

MACHINE	MAX CAPACITY	
MICRO VERTEX 750 – 1000	1000 MM	AIR PRESSURE BASE / DOUBLE TOOL SETTING POINTS

### 3D SCANNING EQUIPMENT

Our maximum 3D printing capabilities are 320mm x 130mm x 150mm. Software used is Autodesk Power Shape and Feature Cam.

MACHINE	MEASURING RANGE	POINT REPEATABILITY (MM)	VOLUMETRIC ACCURACT (MM)	LASER ACCURACY
NIKON LC60DX LASER SCANNER	UNLIMITED	-	-	6um
NIKON MCAX 7-AXIS	2.5M	0.049	0.069	66um

### CAD/CAM WORKSTATIONS

Installation of our edge cam solid cad cam production system and our DNC link system brings the interface between the programming and machining together.

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