



RLC
Ronaldsway

Technology. Optimised.

Supplying complex prismatic components to Industry

An introduction to RLC Ronaldsway

Capabilities / Machine shop plant

Milling Machine Capability

Type	Capacity	Machine Type	Materials Machined
5-Axis	Up to 730Ø x 500mm Or 800x450x600 in certain configurations		
Matsuura		MAM72-63V	Al
MAZAK		Variaxis 730 (2)	Al, Ti, Steels
MAZAK		Variaxis 500	Ti

Milling Machine Capability

All 5-axis machines equipped with Renishaw probing, tool measurement & management capability

Capabilities / Machine shop plant

Type	Capacity	Machine Type	Materials Machined
4-Axis	Up to 1050x800x800mm		
MAZAK		FH6800 (2)	Al, Ti, Steels
MAZAK		HCN6000 (2)	Ti, Steels
Matsuura		MAM700 (3)	Al, Ti, Steels
Matsuura		FX50	Al
Other assorted 4-axis machines and 3-axis equipped with ancillary rotary axes.			

Main 4-axis machines equipped with Renishaw probing.

Type	Capacity	Machine Type	Materials Machined
3-axis	Up to 20000x1000mm		
Matsuura	800x550x500mm	R+800	Ti, Al
Matsuura	assorted	RA1,RA2,RA3 (7)	Al, Ti, Steels, Ni based
Matsuura	2000x1000x250mm	FX10	Al
Other assorted 3-axis CNC & NC machines			

Capabilities / Machine shop plant

Type	Capacity	Machine Type	Materials Machined
Turn Mill	Up to 400Ø x 1500mm		
MAZAK	Full 5-axis	Integrex 400	Al, Ti, Nickels, Steels
DMG	Twin spindle, Twin Turret (total 9-axes)	GMX400	Al, Steels
DMG	Twin spindles, one with full B axis.	TWIN65 (2)	Al, Steels
DMG		TWIN42	Steels
Other assorted CNC turning centres with bar feed and powered tooling, sliding workpiece capability.			

Capabilities / Machine shop plant

Grinding Capability

Type	Capacity	Machine Type	Materials Machined
Studer	Varies - fixtured	5-axis Grinder	Steels, Ti, Nickels
Jung	Up to 600x240mm	Creep feed / Surface Grinder (4)	Al, Steels
Jones & shipman	External - 200Ø x 1000mm Internal – up to 200Ø	Cylindrical Grinder	Steels
LIDKOPING	1.5-55Ø x300mm	Centreless Grinder	Steels
Sunnen	3-50Ø up to 160mm	Honer	Steels, Nickels, Ti

Measurement & Metrology

- 7 Various Mitutoyo CMM equipped with Renishaw probes
- Hommel Opticline510
- Mitutoyo PJ-A3000 Profile Projector
- Full suite of Conventional metrology equipment

Capabilities / Heat Treatment Facility

Vacuum Furnace

Process Temperature Range: 600-1100°C (+/-8°C)

Load Capacity: 550mm x 900mm x 350mm High

Atmosphere: Vacuum 5×10^{-2} mBar

Quench: High Purity Nitrogen to 6 Bar.

ACE Sealed Quench Furnace

Process Temperature Range: 600-100°C (+/-5°C)

Load Capacity: 750mm x 750mm x 750mm

Atmosphere: Nitrogen/Methanol/Propane/Ammonia (Synthetic Endo)

Alternative Atmosphere: Air

Quench: Nitrogen, Water, Oil (Transfer time – 40 seconds)

Alternative Quench: Air

Automated Processes.

Capabilities / Heat Treatment Facility

HBT Tempering Furnace

Process Temperature Range: 600-100°C (+/-5°C)

Load Capacity: 750mm x 750mm x 750mm

Atmosphere: Nitrogen/Methanol/Propane/Ammonia (Synthetic Endo)

Alternative Atmosphere: Air

Quench: Nitrogen, Water, Oil (Transfer time – 40 seconds)

Alternative Quench: Air

Automated Processes.

Nitride Facility

Process Temperature Range: 480-520°C (+/5°C)

Load Capacity: 650mm x 650mm x 650mm

Ammonia Dissociation Monitor and Control System

Capabilities / Heat Treatment Facility

Oven 16

Process Temperature Range: 100-250°C (+/5°C)

Load Capacity: 450mm x 460mm x 750mm

Atmosphere: Air

Quench: Air

Oven 21

Process Temperature Range: 100-250°C (+/5°C)

Load Capacity: 450mm x 460mm x 600mm

Atmosphere: Air

Quench: Air or Water (Transfer time – max 5 seconds)

Suitable for Aluminium work (indirect heating system).

Capabilities / Wet Treatment Processes

Process	Capacity	Materials
Chrome Plate	700mm x 900mm x 500mm	Steels, Ali Bronze
Copper Plate	700mm x 1020mm x 500mm	Steels
Tin Plate	700mm x 1020mm x 500mm	Steels, Ali Bronze
Soft Anodic Plate	700mm x 560mm x 500mm	Alluminium Alloys
Hard Anodic Plate	700mm x 560mm x 500mm	Alluminium Alloys
Cadmium Plate	700mm x 1020mm x 500mm	Steels, Ali Bronze
Passivation	700mm x 1020mm x 500mm	Steels
Parkerise	700mm x 1020mm x 500mm	Steels
Scratch Brush	350mm x 300mm x 450mm	Steels, Brass
Crocel Dip	170mm x 150mm	Steels
Pickling Titanium	700mm x 1020mm x 500mm	Steels
De Embrittle	450mm x 450mm x 350mm	Steels

Capabilities / Wet Treatment Processes

Process	Capacity	Materials
Pickle	700mm x 1020mm x 500mm	Steels, Titanium
Degrease	800mm x 2400mm x 900mm	All metallic materials
Strip Copper	700mm x 1020mm x 500mm	Steels
Black Bronze	170mm x 150mm	Steels
Alocrome Dip	700mm x 1020mm x 500mm	Aluminium and Magnesium Alloys
Electroless Nickel	300mm x 300mm x 250mm	Steels
Soft Anodic Chromic	700mm x 900mm x 600mm	Aluminium Alloys
Passivation Chromate	700mm x 1020mm x 500mm	Steels
Chromate to RPS22 RR	700mm x 1020mm x 500mm	Magnesium Alloy
Nickel Strike	700mm x 1020mm x 500mm	Steels, Ali Bronze

Capabilities / Paint Shop Media Applications

- Dry Film Lubricants
- Enamel's
- Epoxy's
- Polyurethane's
- Lacquer's
- Gloss Paints
- Matt Paints
- Heat Resistant coatings
- Both single and two pack paint applications

Materials - all metallic materials

Capabilities / NDT

Fluorescent Water Washable Penetrant

Level 2 sensitivity
Capacity - 34" X 17" X 31"
All metallic materials

Post Emulsifiable Penetrant

Level 3 sensitivity
Capacity - 34" X 17" X 31"
All metallic materials

Fluorescent Magnetic Particle Inspection

Capacity - 59" X 12"
Ferromagnetic materials

Temper Etch Inspection

Ammonium Persulphate Solution
Capacity - 34" X 17" X 31"
Non stainless steels

Capabilities / Abrasive Blast and Vibro Deburr

Media	Capacity	Materials
Glass Bead	42" x 30" x 24"	Steels, Aluminiums, Titaniums
White Alumina	42" x 30" x 24"	Steels, Aluminiums, Titaniums
Brown Oxide	42" x 30" x 24"	Steels, Aluminiums, Titaniums
Steel Shot	49" x 38" x 30"	Steels
Vibro Deburr	34" circumference	Alluminium Alloys, Steels
Vibro Deburr	42" circumference	Titanium



RLC
Ronaldsway

thank you for
your time /