



ROBERT BRAY ~ SINCLAIR HARDING

MAKERS OF FINE CLOCKS

Capacity List

CAD/CAM

- 2 x Solidworks Professional 2019
(Since 2008)
- OneCNC XR8

CNC Milling

- HAAS Super Mini Mill 2
With Nikken NCT200 4th Axis
508mm (X) x 406mm (Y) x 356mm (Z)
10k Spindle Speed (option for 20k spindle speeder)
- HAAS Super Mini Mill
With HAAS HA5C 4th Axis
406mm (X) x 305mm (Y) x 254mm (Z)
10k Spindle Speed
- DMG MORI SEIKI MILLTAP 700
700mm (X) x 420mm (Y) x 380mm (Z)
24k Spindle Speed

CNC Turning

- DMG MORI SEIKI CTX 310 Ecoline
Upto 200mm
5k Spindle Speed
- Spinner SB CNC Lathe
Max Bar dia 27mm
8k Spindle Speed
- HAAS Office Lathe
Upto 200mm
6k Spindle Speed

Wire Erosion

- Joemars AWT3S
350mm (X) x 250mm (Y) x 210mm (Z)
Max Weight 300kgs

Gear Cutting

- Mikron 79 Hobbing Machine
41mm Max cutting dia 0.3 mod to 1 mod
- Sykes V4 Gear Shaper
110mm Max cutting dia 0.4 mod to 1 mod

Cleaning

- Guyson Ultrasonic Cleaning Tank and Rinse
- Finnsonic Ultrasonic Cleaning Tank

Heat Treatment

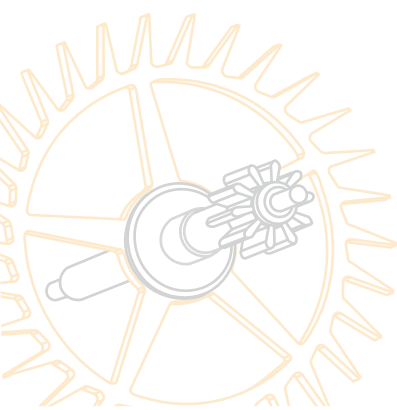
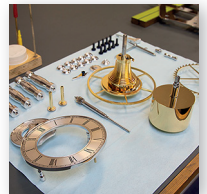
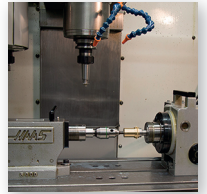
- Hardening and Tempering
- Carbolite Lab Oven
Max temp 1200 degrees C
- Lab Oven
Max temp 300 degrees C
- Furnace
Max temp 900 degrees C

Electro Plating

- Nickel Plate 0.005-0.015mm
Work Area 160mm (W) x 430mm (L) x 400mm (H)
- Gold Plate 23.5 Ct
Work Area 160mm (W) x 430mm (L) x 400mm (H)
- Rhodium Plate
Work Area 160mm (W) x 430mm (L) x 400mm (H)

Finishing

- Shot Blasting Guyson Euroblast 4
Various media available
- Graining
- Lapping
(140mm Dia) plus polishing option
- Polishing



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