



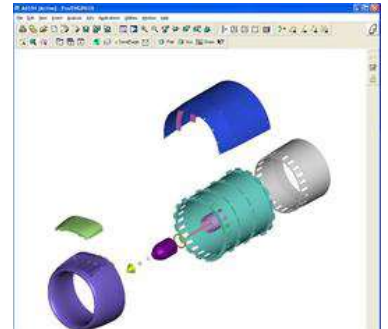
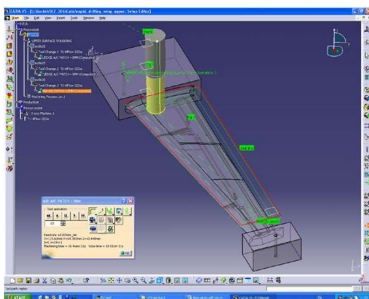
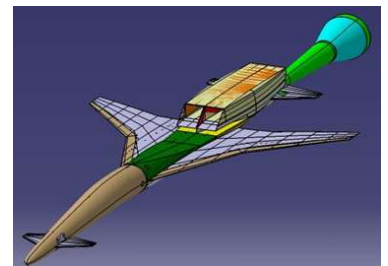
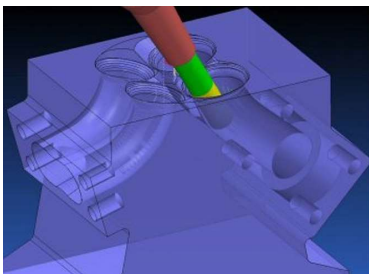
Design Services

CADCAM

Autodesk Power shape/Power Mill4 seats

Design - CATIA v5

8 Design Engineers, highly skilled in design, development & stressing.





CNC Machining

CNC Milling (3, 4, 5 Axis)

5-Axis

Huron KX-50M	Traverse	2000 x 1700 x 800mm
Hernle C250	Traverse	600 x 550 x 450mm
Hermle C400	Traverse	850 x 700 x 500mm
DMU125P	Traverse	1250 x 880 x 800mm

4-Axis

DMU 100T

3-Axis

2 x Doosan DNM500	Traverse	1020 x 540 x 510mm
Doosan DNM5700H	Traverse	1052 x 572 x 512mm
Bridgeport X1000	Traverse	1020 x 610 x 610mm

CNC Turning

Doosan Puma 3100XLY

12" chuck x 2100mm





Lathes

Colchester Mastiff 1400	Ø535 x 1500mm length
Colchester Master 2500	Ø330 x 635mm or 1000mm

Mill

Huron MU50 Mill	1295 x 698 x 500mm
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Vertical Jig Bore

Newall Model 2451	Traverse	914 x 610 x 457mm
Newall Model 2436	Traverse	610 x 457 x 381mm
Newall Model 1520	Traverse	393 x 206 x 305mm

Grinding

Andmar surface Grinder 618-TS	150 x 450mm
Andmar surface Grinder YSG-1224	300 x 600mm
Jones & Shipman 1305 Cylindrical Grinder	Ø254 x 1016mm

Saw Cutting

Mega Saw	Max cut size 400mm x any length
Mid Saw	

Electric Discharge Machining



EDM Wire & Spark Erosion

2 x Agie-Charmilles Cut 300 SP

549 x 349 x 400mm

Charmilles Roboform 810

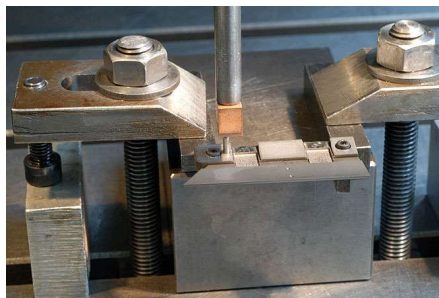
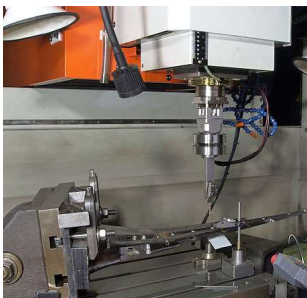
Table 1200 x 800 x 500mm

Workpiece 1500 x 1000 x 500mm

Charmilles HD10 hole driller

Traverse 700 x 400 x 400mm

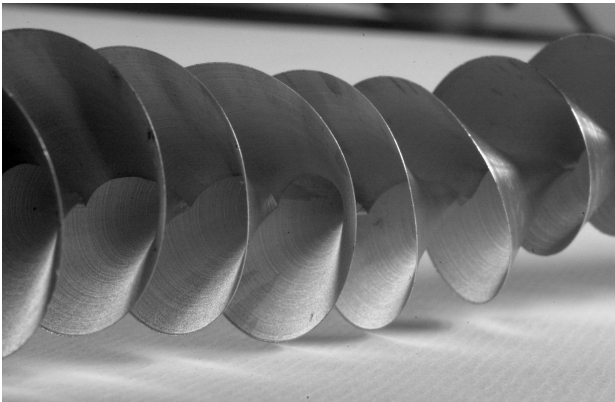
Max Hole Depth 345mm up to $\varnothing 3$ mm



Materials

Precision Machining of Exotic Materials, Hard Steels & Alloys

- Maraging Steels (200, 250 & 300 grades)
- Titanium
- Stainless Steels
- Tool Steels
- Aluminium Alloys
- Copper
- Brass



Additive Manufacturing

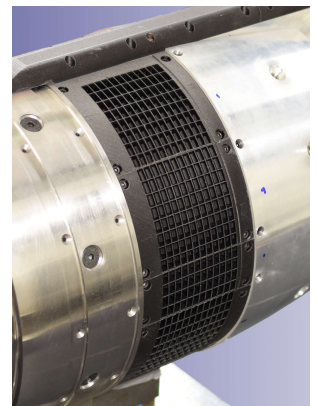
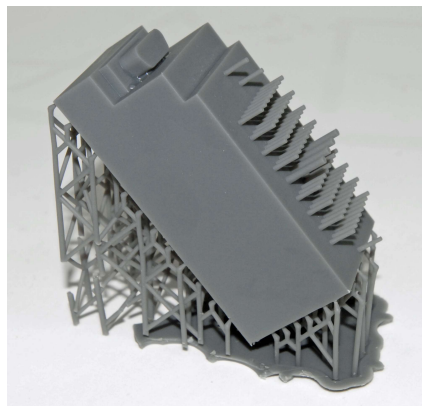
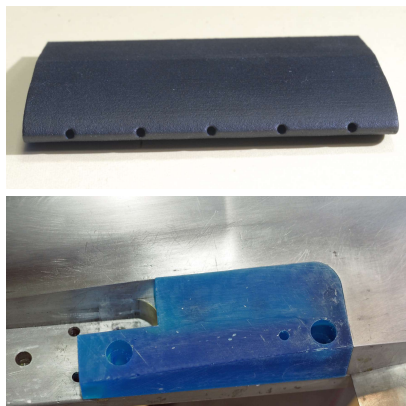
3D Desktop Printers

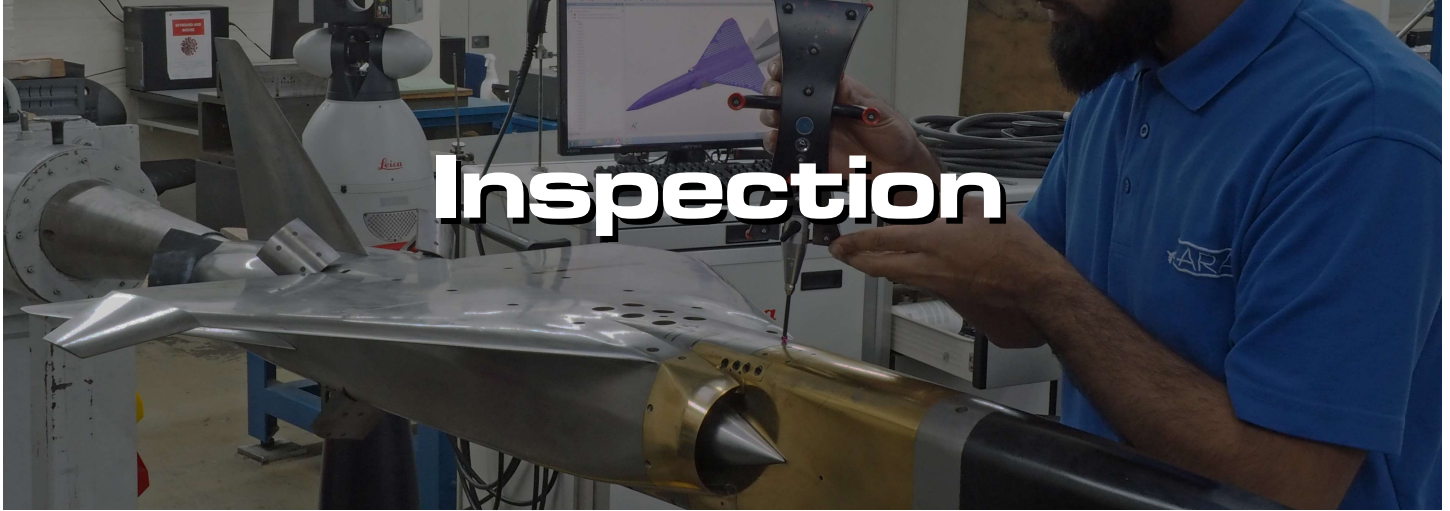
Markforged Mark Two

Build Volume	320 x 132 x 154mm
Z Layer Thickness	100 microns
Material	Onyx
optional	Carbon fibre/Kevlar/fibreglass re-enforcement

Formlabs Form 3

Build Volume	145 x 145 x 185mm
Z Layer Thickness	25-300 microns
Materials	Draft Resin Grey Pro Resin Rigid resin. Others available





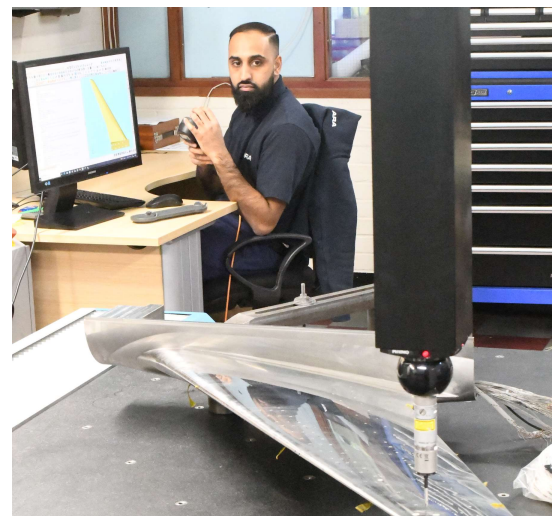
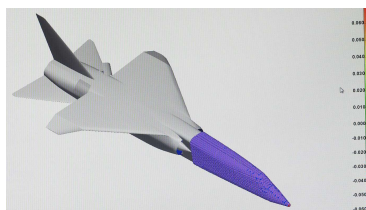
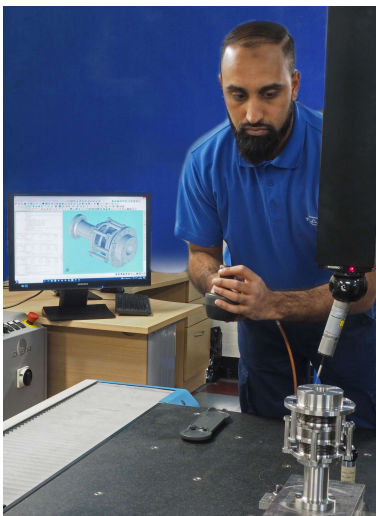
Inspection

Leica Optical Scanner

- Highly Versatile measurement of parts & Assemblies.
- Reverse Engineering from scanning to a 3D virtual model
- Accuracy of 50 microns

DEA Global Image 12-22-10 CMM Inspection Machine

- 2200 x 1200 x 1000mm
- Equipped with Renishaw SP25 Scanning head
- Full surface scanning & point data
- Accuracy within 5 microns



Assembly/Fitting

Assembly / Fitting Team

7 Fitting Engineers

- Versatile high skillset in:
- Hand Finishing
- Assembly
- Instrumentation techniques

