

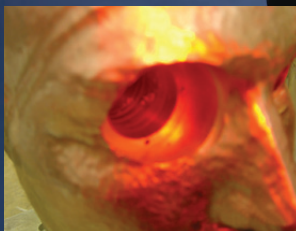
Lofting Services North West

CNC precision machining
Patternmaking
CAD CAM models
Jigs and fixtures
Press tools

CAD / CAM



Lofting Services North West

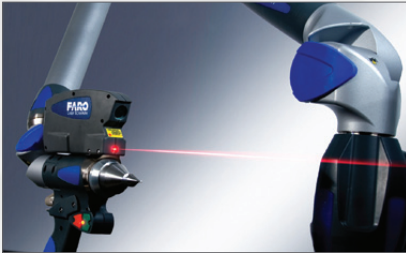


Human Head – Stage 1
Machining used to simulate
fighter pilot retinal
responses.

**Our range of products
and services include:**

- | | |
|--|----------------------------|
| AOG'S | Honeycomb Cutting Fixtures |
| Assembly Fixtures | Hot Form Tooling |
| Bonding Fixtures | Hydro-form Tools |
| CAD/CAM Models | Jigs |
| Checking Fixtures | Kit Tooling |
| Collapsible Mandrels | Laser Holding Fixtures |
| Complete UAV Tooling | Lay-up Tools |
| Manufacture | Mock-ups - Simulators |
| Composite Mould Tools | Multiple Nesting |
| Composite Pattern Masters | Plaster Mould Tools |
| Composite Trim Tools | Press Tools - Pressings |
| Conventional Models | R.T.M Tools |
| Customer Specific
and non-drawn tools | Reverse Engineering |
| Drill Assembly Fixtures | Rotational Mould Tooling |
| Drill Jigs | Rout Tooling |
| Drop Hammer Tools | Special Projects |
| Dual Form Engineering
Solutions | Spot Welding Fixtures |
| Bespoke Fixtures | Stretch Form Tools |
| Foundry Patterns –
hand-made or CAD/CAM | Stud Weld Masks |
| Foundry-pattern Equipment | Trim Fixtures |
| Hammer Forms | Vacuum Form Tooling |
| | Vacuum Rout Fixtures |
| | Weld Assembly Fixtures |
| | Wind Tunnel Models |

Precision engineering solutions - whatever the requirement



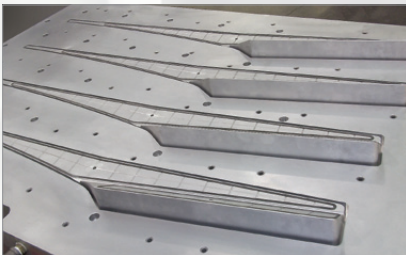
Precision: Faro arm

Faro Arm fitted with laser line probing system interfaced with 'Geomagic' scanning software.



Precision: Scanning and Inspection

Platinum and Quantum Faro Arms – Displaying their versatility when scanning and inspecting. .



Precision: Fixture

Aluminium alloy 5 Axis Multi-Impression Vacuum Routing Fixture. .

Opposite page

Automotive Industry: Tooling

Main image: Aluminium alloy intake manifold tooling used to make ultra light-weight carbon fibre rally-car manifolds.

Inset: Completed carbon fibre manifold moulded using collapsible aluminium alloy tooling

Inspection and Quality

Our CMM inspection facility gives customers assurance that work is within tolerance and inspected back to CAD. Surface presentation formats are geometric, max-min, bestfit or x,y,z.

Lofting Services North West has been approved by Lloyds Register Quality Assurance Limited to the following quality management system standards ISO 9001:2008 AS 9100 Revision C.

We operate a documented quality system controlled and administered by the Quality Manager who ensures the maintenance of correct quality levels, specified or otherwise, in respect of products and services.

Quality objectives

The quality system is continually reviewed by external/internal audits to ensure that all processes are reflected in the Quality System.

The quality system provides assurance to the customer that all materials supplied conform to the specified requirements of the contract and



the technical control documentation.

It also provides assurance to the effect that all production, process control and inspections are carried out in accordance with documented procedures based on recognised standards.

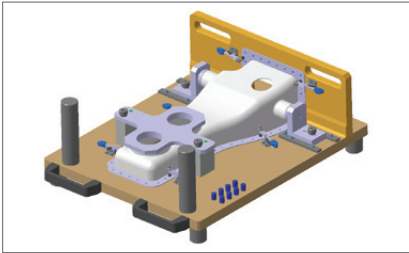
The quality system will provide assurance to the customer that all suppliers of materials and services to Lofting Services North West are able to supply products or process assistance of an agreed quality level.



Lofting Services North West

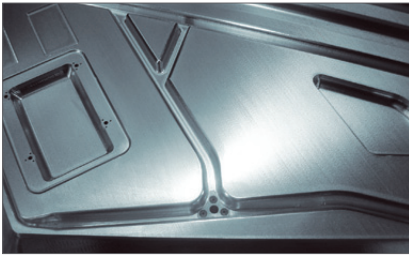


Continual support – throughout your project and beyond



Aerospace Industry: Fixture

Aircraft E.C.U. system composite component. Aluminium alloy drill, rout, bond and I.C.Y. assembly.



Aerospace Industry: Tools

Finish machining of an aluminium alloy vacuum forming tool



5 axis Bed-mill

5 Axis Umach CNC bed-mill – Heidenhein 530i Control, Continuous C Axis 5m x 2.5m x 2m

LSNW prides itself on owning state-of-the-art 3 and 5 axis CNC milling machines, all stringently serviced and maintained to ensure accuracy and reliability are assured.

These machines are capable of cutting most materials at high speeds, utilising the latest in cutting tool technology and the most up-to-date 'Delcam' Power-mill machining software. All the machines are networked so programs can be transferred onto machine hard drives in seconds.

Technology – 'a flexible approach.'

Using remote software, machine environment digital cameras and tool changing facilities enables us to utilise un-manned machining at every opportunity, 'lights-out machining.' This allows time savings to be transferred into cost-savings, which are then passed on to the customer.

High speed machining.

High speed machining is not just about cutting faster. HSM is about harnessing higher speeds and feed rates to produce

parts that would be impractical to machine at lower speeds.

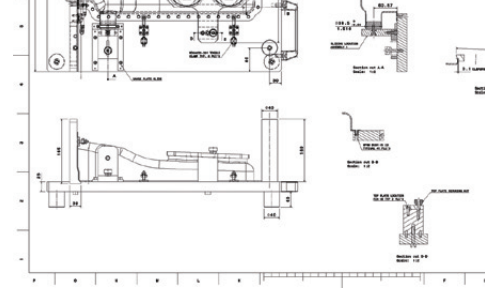
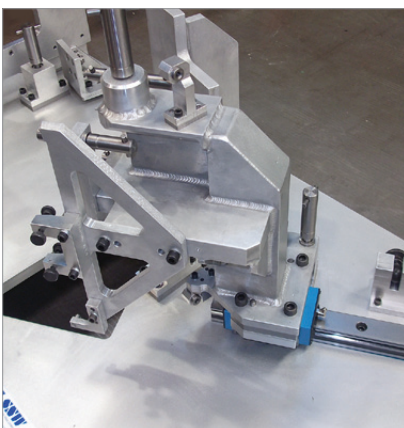
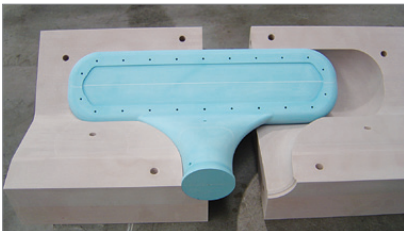
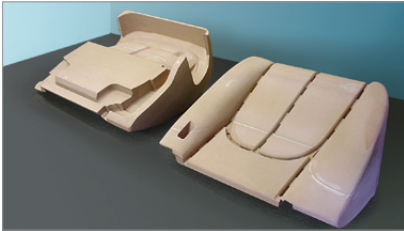
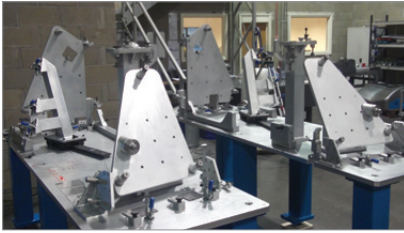
The tool paths are the key to this. Only the right tool paths can turn faster into better. To achieve this we have 6 seats of the number-one CNC machining software, Delcam Power-mill, and the expertise, through relentless training, to implement it correctly.



Service contracts.

All the machines have service contracts and are maintained by the machine agents. These contracts cover the machine in the event of major breakdowns, guaranteeing they are back up and running within 48 hours, causing no major delays to the tight delivery schedules expected by our customers.





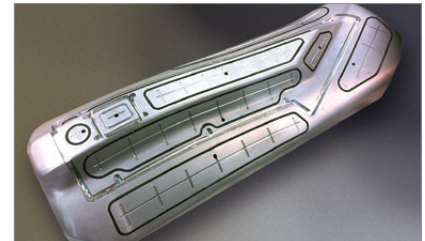
A wealth of knowledge and experience at your disposal

Founded to service the needs of the Aerospace Industry, supplying printed aluminium templates, or 'Lofts', Lofting Services Northwest Ltd. (LSNW) has rapidly grown and diversified to provide a comprehensive CAD/CAM and tooling service to a wide range of industry sectors, from food processing to Automotive (rally-cars & Formula 1) to rotational mould tooling.

Specialists

Recognised as specialists throughout the World, LSNW have built an enviable reputation: CNC Machining, Design (Including reverse engineering), offering a superior quality service at an affordable cost.

Based in Denton, Manchester at the heart of the 'United Kingdoms' motorway network and minutes from Manchester International Airport, LSNW and our in-house design team CAD/CAM Engineering Design Services Ltd are independent companies situated on a brand new 3 acre site in a 'state-of-the-art' 30,000sqft purpose-built facility.



Embedded quality

With quality embedded in our design approach, team-work and our dedication to the most accurate measurements and the tightest tolerances, combined with many years of experience in the Aerospace, O.E.M. and Automotive industries allows us to offer knowledge based engineering solutions to meet our ever changing customer requirements. We fully understand the need for flexibility and accuracy whilst working to strict deadlines within given budgets.

From reverse engineering using digital scanning equipment, to full 3D modelling from last-minute data delivered via email, LSNW and CAD/CAM have the capacity to supply our customers with their exact needs.

Lofting Services North West - trusted by the following companies





Lofting Services North West

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