



NEWBURGH ENGINEERING CO

Newburgh Engineering is a precision manufacturing business with a remarkable engineering heritage dating back to 1939. Originally established by Isaac Middleton, the company built its reputation on craftsmanship, reliability, and consistently high standards of quality.

Today, that legacy continues through a modern, employee-owned business focused on delivering high-integrity manufacturing solutions for safety-critical and highly regulated industries.

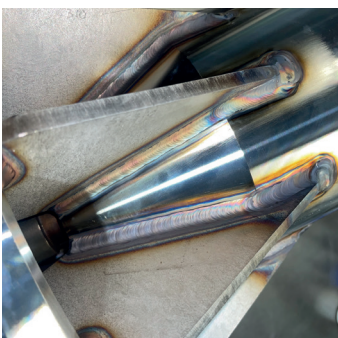
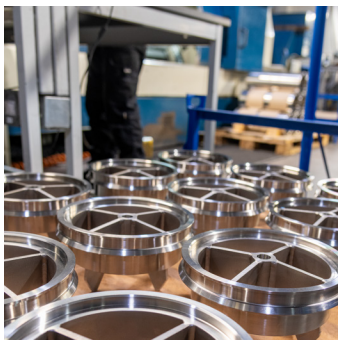
We specialise in Manufacturing as a Service (MaaS), producing precision-engineered components and assemblies for sectors including nuclear, defence, aerospace, rail, energy, and advanced industrial applications. Our capabilities include advanced CNC machining, 9-axis mill-turn technology, fabrication and welding, water jet cutting, and specialist manufacturing processes supported by strong quality systems and disciplined process control.



What makes Newburgh Engineering different is not only what we manufacture, but how we work. As an Employee Ownership Trust (EOT), we operate with a long-term mindset built around sustainability, responsibility, and shared success. Our people are beneficiaries of the business, creating a culture defined by loyalty, accountability, collaboration, and pride in our work. We believe that engineering excellence comes from empowered people working together with trust, integrity, and a shared sense of purpose.



Rather than acting as a traditional jobbing shop, we focus on long-term partnerships with customers who value consistency, reliability, and specialist expertise. Our small, secure site and people-centred approach allow us to deliver sensitive and specialist manufacturing work with exceptional attention to detail.



Our capabilities

Our capabilities include:

- 9 axis mill turn
- Milling up to a 1m³
- Turning up to 2m long x 700mm dia.
- Advanced manufacturing including:
 - rotary 4th axis milling with automatic vice and robot loading/unloading
 - turning with Y axis, driven tooling and auto bar feeder
- Fabrication and welding
- Water Jet Cutting
- CMM Inspection
- Dye penetration testing
- Ultrasonic cleaning

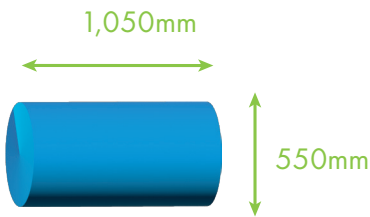
At Newburgh Engineering, we honour our heritage by continually evolving, investing in people, technology, and continuous improvement to ensure we remain a trusted manufacturing partner for generations to come. Our ambition is simple: to be the team customers, employees, suppliers, and partners most want to work with.

If you would like us to help improve your supply chain, then please contact us.

Get in touch now to see how we can help you.

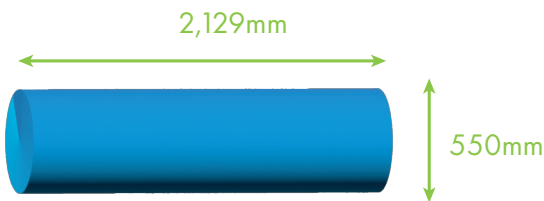


Our capabilities

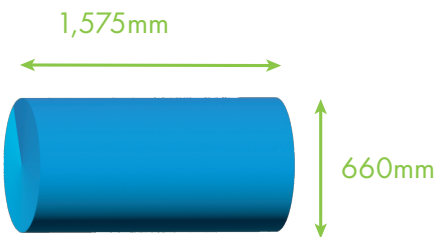


Turning

CNC Daewoo Puma 400
Swing over bed: Ø700mm
Max Ø550mm x 1,050mm

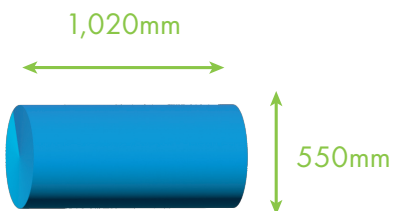


CNC Daewoo Puma 350L
Swing over bed: Ø700mm
Max Ø550mm x 2,129mm



CNC Daewoo Puma 15
Swing over bed: Ø795mm
Max Ø660mm x 1,575mm

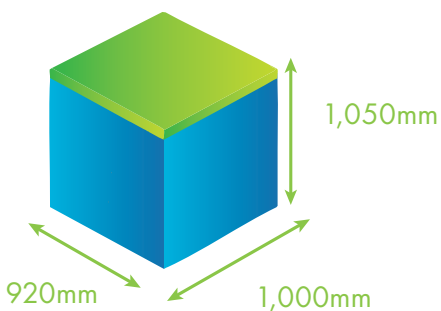
Mill/Turn



CNC Puma MX2000 ST (2 Machines)
Twin turning spindle, milling / turning spindle & bottom turret. Swing over bed: Ø750mm
Turning Max: Ø550mm x 1,020mm
Tools 40, Milling spindle RPM 10,000. 15kw spindle power.

Horizontal Machining

CNC Mori-Seiki MH63 (4 Axis)
Travel: 1,000mm x 1,050mm x 920mm
Twin: 630 x 630 pallets, 13000rpm spindle speed



Our capabilities

WaterJet Cutting

Power Jet Systems CNC waterjet cutter
Max cutting envelope 2,085mm x
1,500mm x 150mm thick (Steel).

Inspection

Mitiutoyo Euro-C 122010 (Bridge Type)
CMM
Travel: 2,000mm x 1,200mm x 1,000mm

Dye Penetration Inspection

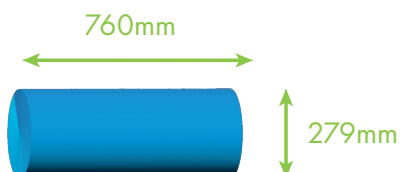
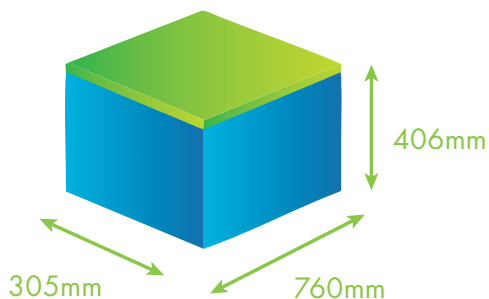
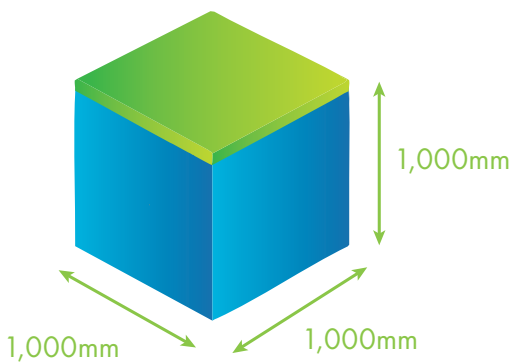
Surface Finish Inspection

Fabrication and Welding

Working strictly in accordance with third party approved welding procedures, our engineers are qualified and coded to undertake the fabrication and welding of most grades of carbon steel and Stainless Steel grades 304L and 316L.

Approved welding procedures and the coding of welding engineers to other project-specific standards can also be supplied including Low-temperature carbon steel and most grades of Stainless Steel including Duplex and Hasteloy.

Our fabrication and welding engineers are qualified and coded by TUV - UK Ltd and BS EN ISO 9606-1:2017 - BS EN ISO 5817:2017.



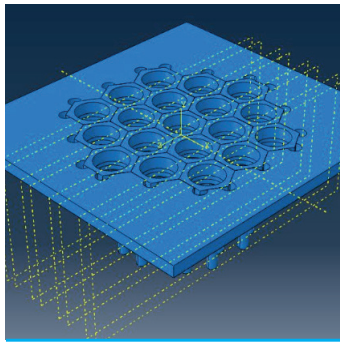
Toolroom / Development

CNC Haas TM-1 Toolroom Milling Machine

Travel: 760mm x 305mm x 406mm
Maximum spindle speed 4000rpm
BT40 spindle taper

CNC Haas TL-1 Toolroom Lathe

Swing over cross slide 279mm
Distance between centres 760mm
Spindle bore 58mm
Max spindle speed 1800rpm



HeliGrids

Faster Delivery. Lower Risk. Smarter Manufacturing.

Newburgh Engineering's Modular HeliGrid (MHG) technology transforms the way complex HeliGrids are manufactured, helping customers reduce lead times, lower costs and improve long-term maintainability.

Traditional HeliGrids are machined from a single large plate, requiring significant material investment, specialist equipment and highly complex machining processes. Manufacturing can take more than a year, with any production error potentially resulting in costly delays and material waste.

Our patented Modular HeliGrid design takes a different approach.

By manufacturing each feature as an individual component and assembling them into a complete HeliGrid structure, we can dramatically simplify production, reduce risk and accelerate delivery.

Key Benefits

Reduce Lead Times from Years to Weeks

With modular components held in stock and manufactured using readily available materials, Modular HeliGrids can be delivered in weeks rather than the 12+ months often associated with traditional designs.

Lower Manufacturing Costs

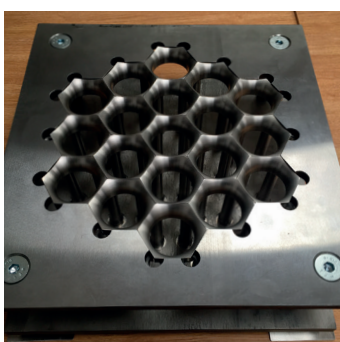
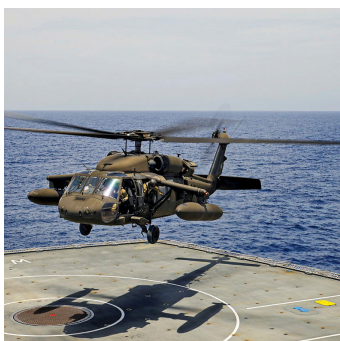
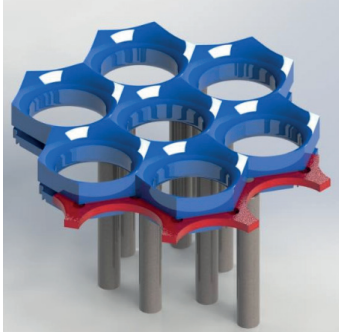
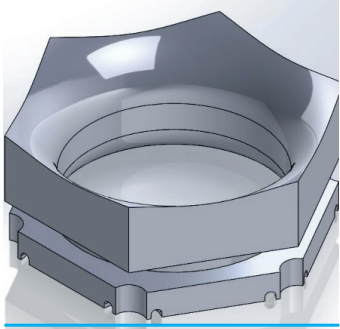
Eliminating the need for large, specialised machining operations reduces capital equipment requirements, material costs and manufacturing complexity, delivering significant cost savings for customers.

Minimise Project Risk

Traditional HeliGrid manufacturing leaves little room for error. If a defect occurs, the entire component can be compromised. With a modular design, individual elements can be replaced without scrapping the complete assembly, reducing risk throughout production.

Easier Transportation and Installation

Unlike conventional one-piece HeliGrids, Modular HeliGrids can be shipped in compact crates, reducing transportation costs and simplifying logistics for global projects.





HeliGrids

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Repairable and Serviceable

If damage occurs during operation, individual modules can be repaired or replaced, extending asset life and reducing maintenance costs compared with traditional monolithic designs.

Innovation Driven by Engineering Excellence

Developed through Newburgh Engineering's research and development programme, the Modular HeliGrid was created to solve a longstanding industry challenge: how to deliver highly complex HeliGrid structures faster, more economically and with less risk.

The result is a patented solution that provides customers with greater flexibility, shorter project timelines and lower whole-life costs without compromising performance.

Patent No. EP3914515A1, US20220064880A1



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