

Company Introduction

Founded in 2008 as a spin-out from the University of Sheffield Advanced Manufacturing Research Centre (AMRC), **Advanced Manufacturing (AML)** is a technology-led advanced manufacturing company specializing in precision machining solutions for aerospace, defense, energy and nuclear applications. In 2025, AML became **part of the Walsin Lihwa Group**, allowing the company to leverage an integrated manufacturing platform, expanded engineering resources and a global support network.

AML is a trusted supplier of high-performance precision machined components for critical aerospace applications. Its advanced manufacturing capabilities include 5-axis mill-turn machining, adaptive machining strategies, metrology, inspection and supply chain integration services. With extensive experience machining titanium, nickel-based superalloys, stainless steels and aluminum alloys, AML delivers complex aerospace components including aerofoils, bearings, gears, casings, blisks and mainline shafts for leading aerospace OEMs and supply chain partners.



Aerospace Differentiators



Aerospace Material Expertise

Extensive machining experience in titanium, nickel-based superalloys, stainless steels and aluminum alloys



Research & Technology (R&T) Innovation

Continuous investment in R&T to develop next-generation machining technologies



Qualification & Process Support

Established laboratory partnerships supporting process qualification and customer approvals



Adaptive Machining & Precision Manufacturing

Advanced machining strategies delivering tight tolerances and complex geometries in partners worldwide



Aerospace Quality & Delivery Excellence

Robust quality systems supporting critical aerospace programs worldwide



Engineering Services

Dedicated engineering support in CAD/CAM, process development and manufacturing optimization

Capabilities

Precision Machining & Metrology

- 30+ DMG Mori 5-axis Mill/Turn Centres
- Gear Capability (Curvic Coupling and Spline)
- Root Slot Milling / Broaching
- Machine Dynamics Control
- Grinding
- Established Supply Chain for Special Processes
- Forging / Material Supply Chain Integration
- Coordinate Measuring Machines (CMM)
- Optical Scanning Equipment
- Adaptive Machining Technologies

Digital Manufacturing

- Fully Integrated Digital Factory
- Real Time Digital Thread Controlling MRP, Machine Monitoring and Supply Chain Control
- AI Integrated Models for Optimised Delivery
- Digital Twin Techniques for Complex Machining Challenges
- NX CAD/CAM
- Vericut Process Simulation

Component Assembly

- Bonding Capability (in Controlled Environments)



Qualification & Certifications



AEROSPACE PORTFOLIO

Product Dimensions



Machined Components	Diameter (mm)		Length (mm)		Weight (tonne)	
	Min	Max	Min	Max	Min	Max
Mainline Shaft	60	1,070	500	6,000	N/A	7
Disc / Blisk / Casing	300	1,600	100	500	N/A	4
Aerofoil	N/A	N/A	50	1,500	N/A	5

Product Applications



▲ Mainline Shaft



▲ Disc



▲ Blisk



▲ Casing



▲ Aerofoil



Walsin



Website

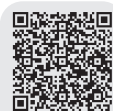


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COGNE



Website

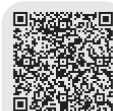


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