

# Metal manufacturing – a sustainability solution

Leading aerospace design, engineering, and manufacturing business Sylatech announces that its Digital Liquid Metal Manufacturing project has been awarded £2.07m of grant funding from the ATI Programme.

Sylatech's £3.4m project, delivered in collaboration with Cranfield University, Alloyed Limited and the University of Sheffield, aims to deliver ultra-high quality aluminium components, with dramatic performance and manufacturing repeatability, exceeding current technologies.

Aluminium shape casting remains heavily under exploited in the aerospace industry, primarily due to concerns over process and product consistency and mechanical performance.

Together with its collaboration partners, Sylatech's Digital Liquid Metal Manufacturing project will focus on elevating the mechanical properties of post-consumer aluminium to reduce weight and increase the in-service life of each casting.

The novel aluminium casting process will also drive aluminium circularity in line with net zero sustainability targets.

Charlie Breese, Sylatech's Managing Director commented "Alongside the technical challenges, there is a fundamental requirement to reshape the aerospace industry's perception of cast components, the presence of both Rolls-Royce and GKN

Aerospace on the project industry advisory panel will support advancement in this area".

The 3-year program promises to bring numerous IP and manufacturing benefits to the UK aerospace, foundry, and aluminium recycling industries, safeguarding jobs and creating significant manufacturing jobs for this cutting-edge process in Ryedale.

