OPEN HYBRID HORIZON 2020 PROJECT

Hybrid AM combines additive and subtractive operations to enable parts to be manufactured and repaired in a seamless process.

The AMBIT® system from Hybrid Manufacturing Technologies allows deposition, inspection and cutting tools to be interchanged enabling machine tools, robots and gantry systems to be repurposed for Additive Manufacturing.

Dr Jason Jones, CEO Hybrid Manufacturing Technologies Ltd

THE CHALLENGE

Hybrid additive and subtractive machines offer the flexibility of additive manufacture together with the accuracy, productivity and surface finish expected from machining. Although significant progress has been achieved in commercialising hybrid AM there is still significant work to do to ensure this technology is fully exploited. The OPENHYBRID project will overcome the technical and commercial barriers of current hybrid manufacturing systems to deliver a single manufacturing system capable of undertaking a wider range of processes in a seamless automated operation.

THE SOLUTION

One for All:
Hybrid Additive Manufacturing (AM) solution for a wide range of machine platforms and applications for small and large companies

All for One:
Several processes in a single machine enabling parts to be manufactured in an unbroken process
THE OBJECTIVES

- Increase the impact and uptake of hybrid AM technology for a wider range of machine tool platforms, processes, materials, and applications
- Develop a single manufacturing system capable of producing large, high volume and complex components without the need for materials handling or post processing
- Develop an all in one hybrid additive and subtractive multi-tool platform using direct energy deposition (DED) AM
- Integrate a machining process to enable fully finished components to be produced
- Enable adding and finishing material for automated repair and new part production

Machine tool platform for Small to medium sized parts

Gantry platform for large parts

PROJECT PARTNERS

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