

Open Architecture Additive Manufacturing – The OAAM Project.

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TWI is taking the lead in the Open Architecture Additive Manufacturing (OAAM) project to demonstrate the ability to manufacture large metallic components via Additive Manufacturing (AM) for the benefit of UK Aerospace. The OAAM programme plans to develop directed energy deposition (DED) AM technologies that can be scaled up to accept multi-metre component sizes for the benefit of UK Aerospace. These new platforms will enable aerospace manufacturers and their supply chains to develop advanced AM manufacturing concepts in the fields of laser-powder and laser-wire, as well as electron beam-wire and arc-wire. This presentation will give details of the project concept and the in-development state-of-the-art research facilities. It will also give some initial examples of large scale (>600mm diameter) components that are being developed in preparation for further upscaling and manufacture on the OAAM facilities.