



Additive Manufacturing landscape in Australia

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Abstract

Additive manufacture also referred to as 3D printing is now playing a major role in a range of industries globally such as the aerospace, automotive and medical because it enhances the ability to fabricate more complex and more functional component parts. It utilizes technologies both metal and polymer to mass manufacture components directly from computer generated data. The products are grown/printed layer by layer without the need for many time consuming manufacturing processes such as tooling, line set up or material change over. Fully functional parts or products are able to be produced, on an as needed basis, with many different components able to be built at the same time dramatically accelerating product's time to market and reducing the cost of production.

Manufacturing industries in Australia face a number of significant challenges, including global economic uncertainty through trade wars, increasing global competition and cost of labour. It is critical that Australia's manufacturing is positioned to address these challenges through enhanced skills and technology. Australian companies over the last five years have invested in additive technology and universities and government labs are supporting this investment through R&D activities.

The presentation will cover Australian additive manufacturing landscape and some of the local R&D activities taking place with a particular focus on research projects undertaken at the RMIT Centre for Additive Manufacturing.