



THE PROBLEM

- The emerging technology of 3D printing can play an important role in space applications, but Australia lacks capacity and investment is necessary for growth.
- 3D printed parts offer reduced mass, high possible complexity, and fast printability of custom-made objects, but not enough skilled worker exist to make them.
- Australia doesn't have a mature space manufacturing sector and capabilities.



THE SOLUTION

- This project is to set up an advanced additive manufacturing facility to support Australian Space Industry with rapid 3D printing of metals including Titanium and Nickle Alloys for space structures using Electron Beam Melting (EBM) technology.
- Fabricate TiAl6V4 components for space and hypersonics applications.
- Expand EBM products to other markets such as Defence and aerospace.



RESEARCH CAPABILITY

UniSA - Future Industries Institute

- Materials science and engineering.
- Optical design and engineering.
- Additive manufacturing.
- Product testing and evaluation.
- Surface Science & nano-technology.
- Design and deposition of multi-layer thin film coating systems.
- Developing environmentally robust coatings for real-world applications.
- Device design and fabrication.



PROJECT PARTNERS



University of South Australia



CONTACT DETAILS - PROJECT LEAD

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