



MEDIA RELEASE

Cut through: More success for DMTC at Innovation Awards

The highest quality cutting tools can now be 3D printed, meaning potential savings in time and money for aerospace and defence manufacturers.

RMIT University and [DMTC Limited](#) PhD candidate Jimmy Toton received the 2019 Young Defence Innovator Award and \$15,000 prize at the Avalon International Airshow for the research, conducted with DMTC and industry partner Sutton Tools.

The award was presented by the Minister for Defence Industry, the Hon Steven Ciobo MP.

The metals used in defence and aerospace are so strong that making high quality tools to cut them is a major, and expensive, challenge.

This collaborative project conducted at RMIT's Advanced Manufacturing Precinct is the first convincing demonstration of 3D printed steel tools that can cut titanium alloys as well as, or in some cases better than, conventional steel tools.

Chief Executive Officer of DMTC, Dr Mark Hodge, emphasised the importance of productivity and cost-efficiency to Australian manufacturers.

“Supply chain innovations and advances like improved tooling capability all add up to meeting performance benchmarks and positioning Australian companies to win work in local and global supply chains,” he said.

“The costs of drills, milling cutters and other tooling over the life of major defence equipment contracts can run into the tens, if not hundreds, of millions of dollars. This project opens the way to making these high-performing tools cheaper and faster, here in Australia.”

Working with Sutton Tools under the DMTC model during Jimmy's research was crucial in ensuring industry-relevant outcomes.

“It is also a strategic investment in bringing the best of industrial and research expertise together, in Australia, and ensuring the Intellectual Property and industrial expertise remains here,” Dr Hodge said.

Additive manufacturing technologies are on the rise globally and Jimmy's project highlights a market where it can be applied because of the benefits that this technology offers over conventional manufacturing methods.