between the lines

NZ Product Accelerator

NZ <u>Product Accelerator</u> is a MBIE funded programme

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Pushing back the frontiers ..

Selective Laser Melting at AUT

(Associate Professor Sarat Singamneni):

"As rapid prototyping gradually evolved into rapid tooling and manufacturing, the selective laser melting, in enabling the processing of metal powders into complex 3D forms direct from digital data, led a sudden surge in both research and commercial interests in additive manufacturing. Substantial progress hence has



been made in spite of the difficulties associated with the point by point processing and layer by layer consolidation of powder metals. Though suitable immediately for a variety of medical and rapid tooling needs, there is more work to do to fully qualify the process for critical industrial applications.

Realising the potential research opportunities, Associate Professor Sarat Singamneni steered AUT to be the first in the Australasian region to invest in a Renishaw laser melting system offering the much needed unlimited freedom for research and investigation. Since installation around June 2014, AUT is engaged in evaluating the possible application of selective laser melting for specific industrial needs, while also actively pursuing alternative material systems and process conditions. We are proud to support the technology development and investment that has followed, with now half a dozen Renishaw laser melting systems within the Australasian region."

Collaboration gets it done..

NZProduct Accelerator - Great to be helping these young entrepreneurs in Wine Grenade

A wine industry start-up's "grenade" is already in commercial trials with a major Hawke's Bay winery.

Wine Grenade, a micro-oxygenation tool that removes the cost and complexity associated with maturing wine, was created by CEO Hamish Elmslie, Jonathan Boswell, Philip



Cockrell, Jorg Kampschreur and Mike Moore and is quickly moving from concept to reality. They teamed up last year to identify possible commercial pathways for a piece of technology developed by Plant and Food Research.

Winemakers can drop the device into their wine to mimic the maturation process that usually happens within oak barrels, making it cheaper and quicker to get the product to market.

So what does a 'wine grenade' look like? "I can't give too much away at the moment," Elmslie says. "But we've developed a prototype and we're undertaking our first set of commercial product trials. We've given it to a world-renowned Hawke's Bay wine maker who is currently using it to treat 11,000 litres of merlot and 11,000 litres of pinot noir. Initial results look pretty promising." When the first 10-week trial is complete, the results will be used to develop further trials in Bordeaux in France, and California in the US. nzh.tw/11528416

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