ASX Announcement

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A3D Delivers Phase 1 Milestone Successfully

Highlights:

- Phase One Parameter Testing successfully completed
- Prints produced consistently with a density greater than 99% across full laser power range
- Material properties compliant with ASTM standard requirements
- High power, high density printing results demonstrate Rapid Manufacturing Technology (RMT) capability and will enable increased print process speed and technology scale-up beyond competitor laser bed fusion printers
- Fume extraction upgrade project on track for completion by end of Q2

Aurora Labs Limited ("A3D" or "the Company") (ASX:A3D), is pleased to provide an update to shareholders on the status of Phase 1 of its 12-month Technology Development Pathway.

Following the Company's major cost saving restructure and subsequent technology review in July 2020, the team continues to progress its Technology Development Pathway with the goal to achieve commercial readiness for the RMP-1 printer by the end of the 2020/21 fiscal year. The pathway comprises a series of milestones, the first of which, Phase One Print Parameter testing, is complete.

CEO Peter Snowsill said:
"We are pleased to have completed the first phase of our Technology Development Pathway and the team is very encouraged by the test outcomes. We see these results as foundational to demonstrating the performance required to achieve commercial readiness for RMP-1. We are geared up for the coming quarter for the implementation phase of our extraction system upgrade project as another key enabler for commercial readiness. "

Phase One: Print Parameter Testing Success

Print parameters are currently being investigated for 316L stainless steel material with the goal to determine the required printer input parameters to achieve high print quality across the full laser power operating range of A3D's RMP-1 Beta prototype. Test prints have been completed comprising approximately 600 metallurgical specimens including test cubes, tensile bars and thin wall test parts across a range of printer input parameters spanning low to high laser power. Most commercially available powder bed fusion printers operate at significantly lower laser power levels than A3D have been testing.

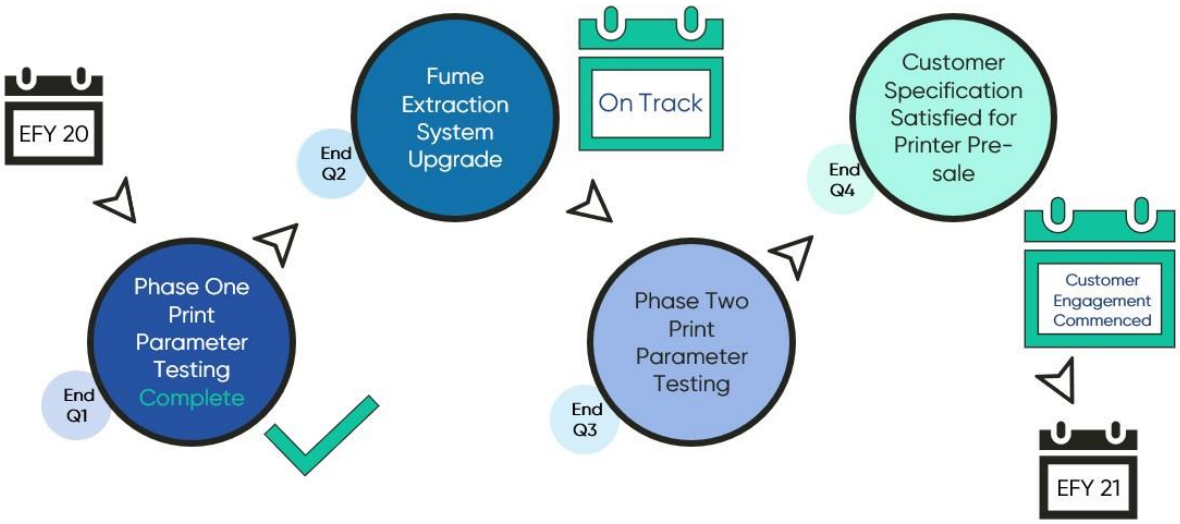

Fig 1: RMP-1 Technology Development Pathway

Select test samples have been assessed internally by a combination of measuring material density, investigating microstructure and leak testing of printed parts. The tensile properties of specific samples have been tested by a 3rd party NATA certified laboratory in accordance with the relevant standards.

Favourable results have been achieved across a range of parameter settings, including 5 laser power settings from low to high laser power. Prints are being produced consistently with density greater than 99% (ASTM B962-17[1]). Initial tensile test results, in the as-printed state and after heat treatment, demonstrate properties that comply with the standard requirements (ASTM F3184[2] Condition B), comfortably exceeding standard requirements for Ultimate Tensile Strength, Elongation, Yield Strength and Reduction of Area. These test results demonstrate the achievement of as printed quality in line with other commercially available powder bed fusion printers; the key difference is that this has been achieved at considerably higher laser power.

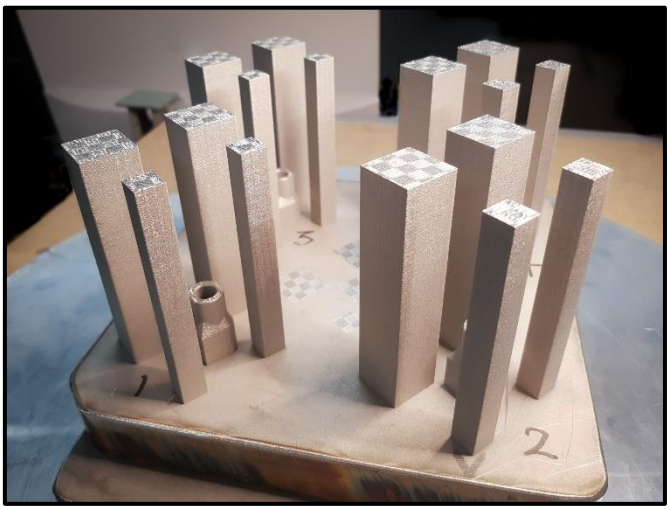

Fig 2: Tensile Bars printed at high laser power

A3D considers these test results to be significant in demonstrating the capability of our RMT to produce high quality prints at high laser power. Incorporation of high power, high quality printing into the suite of technologies A3D is developing and implementing in our RMT will enable us to increase the print process speed and scale up our technology beyond competitor laser bed fusion printers.

Parameter testing and sample printing will continue over the coming quarter, building on the initial test work concurrently with fume extraction upgrade activities.

Fume Extraction System Upgrade

This multi-faceted project is addressing gas flow and filtration, removal of print soot from the chamber, to optimise printer performance and solve an industry-wide metal printing challenge that limits print speed. Ongoing activities include system modelling, prototyping and bench testing, engineering design and equipment specification, software programming, procurement, installation and commissioning activities. Major equipment items are currently being shipped from Europe and are on track for installation and commissioning by the end of Dec 20.

Ends

Approved for release by the Company's Board of Directors.
For further information, please contact: Peter Snowsill, Chief Executive Officer
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[1]ASTM B962 – 17; Standard Test Methods for Density of Compacted or Sintered Powder Metallurgy (PM) Products Using Archimedes' Principle

[2]ASTM F3184; Standard Specification for Additive Manufacturing Stainless Steel Alloy (UNS S31603) with Powder Bed Fusion

ABOUT AURORA LABS

Aurora Labs Limited ("the Company"), an industrial technology and innovation company that specialises in the development of 3D metal printers, powders, digital parts and their associated intellectual property.

Aurora Labs is listed on the Australian Securities Exchange (ASX: A3D)

FORWARD LOOKING STATEMENTS

This announcement contains forward-looking statements which incorporate an element of uncertainty or risk, such as 'intends', 'may', 'could', 'believes', 'estimates', 'targets' or 'expects'. These statements are based on an evaluation of current economic and operating conditions, as well as assumptions regarding future events.

These events are, as at the date of this announcement, expected to take place, but there cannot be any guarantee that such events will occur as anticipated or at all given that many of the events are outside Aurora's control.

Accordingly, Aurora and the directors cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur.

For further information, please contact: enquiries@auroralabs3D.com