ASX Announcement

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MCP - Reinvigorated Development Pathway

Highlights:

- **A3D advances computer simulation to exploit its patented Multilayer Concurrent Printing (MCP) printing process.**
- **Simulation results precede intensive design stage for MCP printing process in newly imagined prototype assemblies and componentry designs aiming to build efficiencies into printing production speeds.**
- **Prototyping of MCP machine to platform future discussions with global manufacturers**

Aurora Labs Limited ("A3D" or "the Company") (ASX:A3D), is pleased to announce significant progress which has been made under an intensive research and development program recently undertaken utilising the Company's 100% owned and patented Multilayered Concurrent Printing (MCP) technologies.

Following significant interest from several global manufacturers looking for increased productivity and costs reductions from existing 3D printing platforms, A3D has focused attention on advancing MCP to a new prototyping stage which will demonstrate its capabilities and provide a platform for further commercial discussions with these manufacturers.

Research projects are proposed to allow for further design and development which are built from computer-based simulations which will focus on utilising varying configurations of MCP in newly realised machine prototype designs.

The Company's patented MCP technology is potentially a disruptive change to the 3D printing market as it breaks the process of single layer printing. Instead of printing on one plane or layer at a time, like most other 3D metal printers currently available, Aurora's MCP can print on multiple layers concurrently. This increases production speed and allows more material to be melted in an efficient timeframe.

The A3D team's application of this technology to pursue this proposition is where we can offer a compelling value proposition to industry to deliver a seamless integration of ongoing product development which incorporates a step change in the printing process through utilising MCP's unique printing benefits.

Staged Pathway

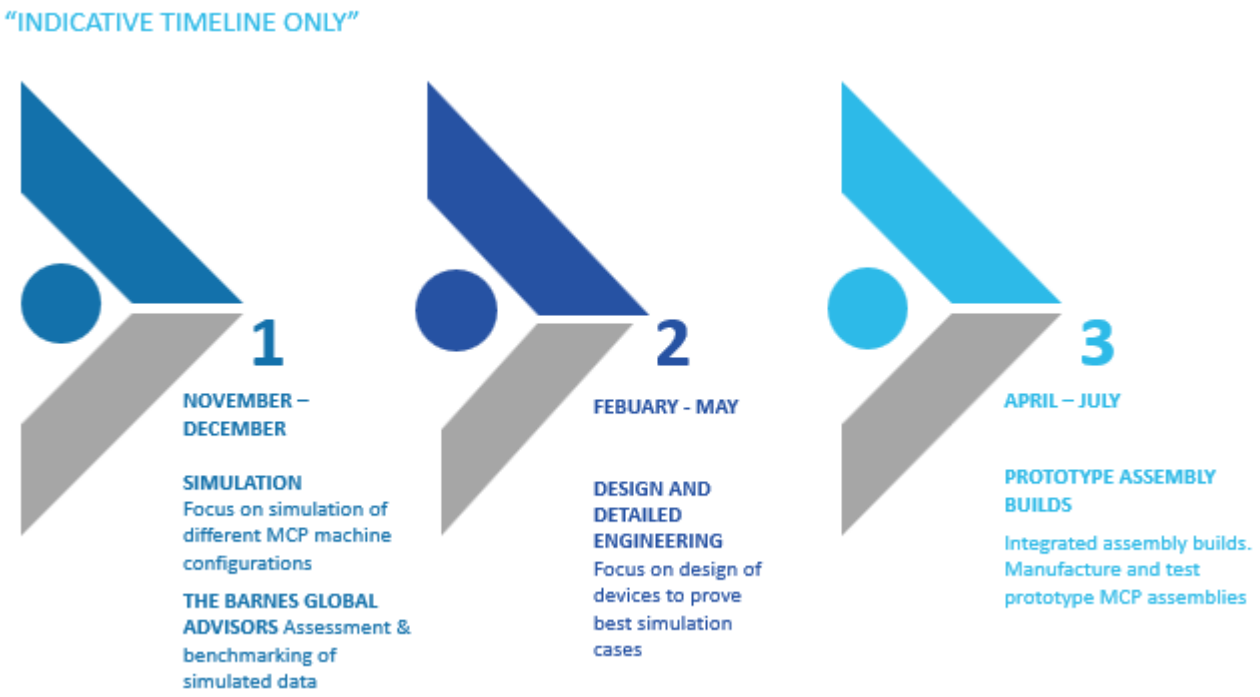
The new and recently launched A3D printer design, the AL250, is an immediate pathway to furthering this research, as the design has advanced to a stage where the printer will enable a hybrid MCP print capability in the form of bidirectional recoating of powders integrated with A3D's patented MCP technology. This first phase is nearing completion given that the AL250 design is nearing an end. Once completed, the AL250 model, equipped with hybrid

MCP will then be bolstered by further computer simulations and innovations as newly imagined and designed laboratory prototype models are delivered in 2024.

The considerable engineering challenges to this project are intended to be resolved via partnerships and collaborations, with discussions already advancing with several key groups both in industry and academia. Simulation data will also be sought to be verified with external participants.

These prototypes will have central to their design, a focus on efficiencies of machine costs, reducing the number of complex laser systems, maximising laser melting of material, and maximising printer bed size while exploiting the MCP patent to its full by designing new recoating systems.

Delivery Timeline



CEO Rebekah Letheby commented:

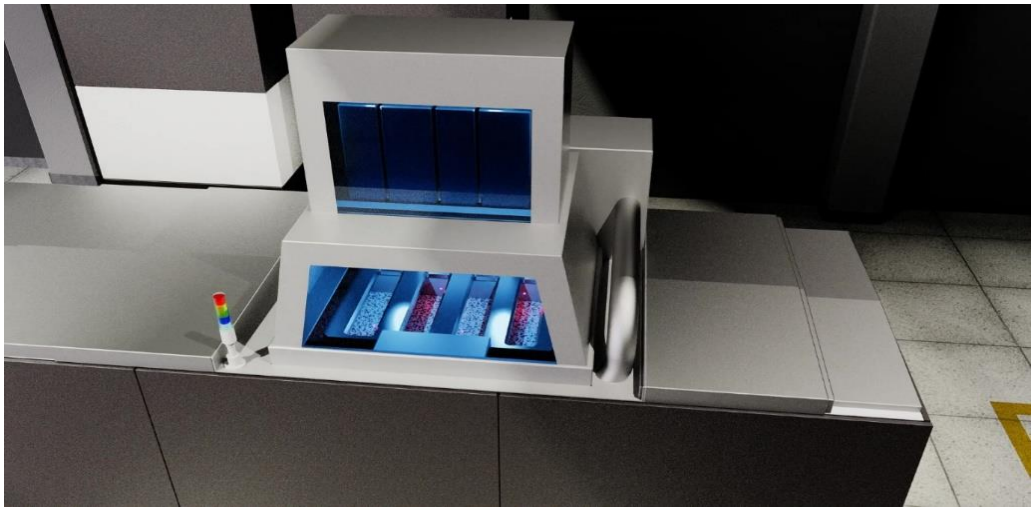
"To optimise the number of lasers installed in a printing system and the number of layers set down concurrently is advantageous to the cost and productivity equation of printing. MCP has challenged industry perception that laser powder bed fusion is slow and expensive. Our current MCP approach to printing is to begin to design printers to operate on and lay powder layers concurrently while traversing scanner and laser optics over large distances or rotating a large powder bed under the scanners where multiple concurrent powder layers can be laid. This leads to a potential marked increase in throughput, ultimately outpacing the speed of existing single layer printing methods. We have a great deal of work to do throughout this project to deliver, but we look forward to the challenge."

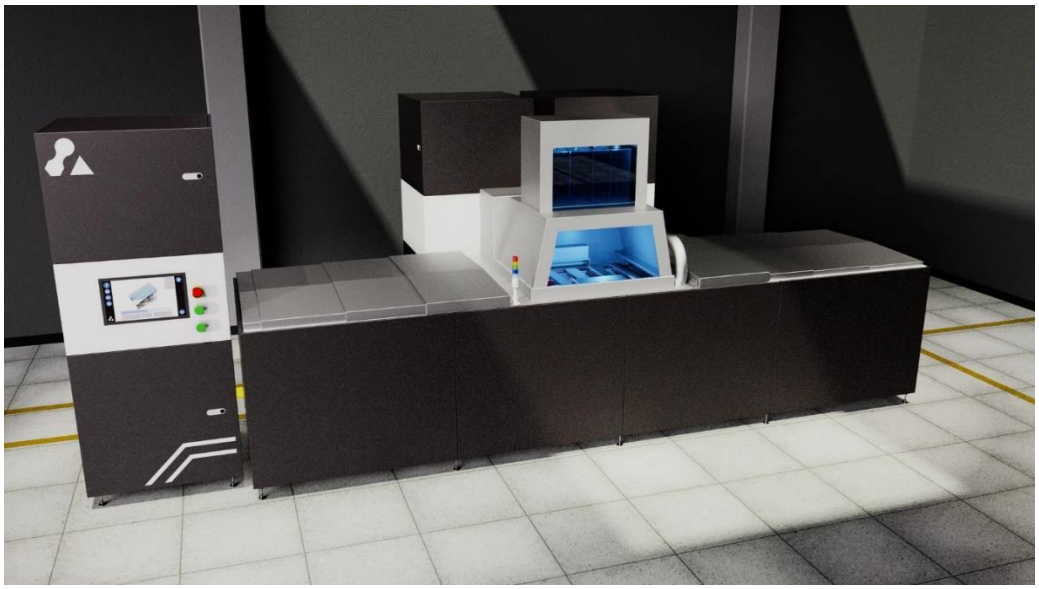
MCP is also beneficial to the immediate focus of industry to deliver parts in an environmentally conscious way in a faster period as duration of prints are shortened. Decreases in time taken to print increases energy efficiencies within the system to move re-coaters, recirculate gases, power heaters and ancillary systems, all saving money and complexity overall.

The project will aim to deliver its first goals with small scale prototype assemblies being designed for experimentation the first half of 2024. The first prototype assembly will focus on a gantry system and a powder bed which aims to give

extensive area for the lasers to operate on multiple layers. The experiment will test the ability for the lasers to print to the powder bed while the lasers move on an independent mobile gantry, traversing the print bed. The lasers will be dependent on the multiple re-coaters moving on a separate independent gantry to form multiple layers ahead of lasing. This is in contrast to where lasers operate in a fixed position in a traditional laser powder bed machine with one recoat sweep at a time.

A glimpse of concept machines in the image below incorporates a focus on increasing the bed size and moving the lasers to the operative powder layers, where multiple powder layers have previously just recoated. This removes the need for a large chamber area where gas and environmental conditions need to be maintained. Covers on the powder bed ideally will retract inside themselves, while still allowing the oxygen free environment to be maintained as the optical and recoating unit move along the powder bed printing. These concepts are still some ways from being fully realised, but the intention of the MCP pathway is to prototype pieces of these concepts and build to an overall operable machine.





MCP Commercialisation - Market Focus

The power of MCP technology to revolutionise production speeds in Laser Powder Bed Fusion (LPBF) has been deeply invested in by the Company. In harnessing improved production speeds, with extreme accuracy that LPBF affords, part printing can grow in line with the expectations for a manufacturing revolution lead by additive manufacturing. Parts ideally should be built on scale with componentry pushing past the 1000 x 800 x 800mm scale of large industry available printing machines and scale into the target of printing serial componentry (large numbers of the same item) or large parts, utilising efficiencies that can compete with other styles of subtractive manufacturing.

Industry such as aerospace, have rocket parts and structural components with large singular bodies, while automotive industries have large componentry and intricate design ideal for large component integration and lightweighting possibilities.

The environmental benefits of recycling powders, building lightweighted components fast is also a benefit to increasing focus to reach toward net zero impacts.

A3D is continuing to engage with potential industry partners around the progress of these prototype builds to better understand specialised requirements of industry printing. These engagements continue to be bolstered by the Company holding service agreements with large industrial companies where they regularly engage on the printing of additive parts with large inventory lists.

Technology Landscape

Additive manufacturing has emerged as a groundbreaking technology with transformative potential, significantly impacting diverse industries such as defence, aerospace, and healthcare. AM has ushered in a paradigm shift, by facilitating the creation of intricate or large tailor-made components with unprecedented precision. Recent developments in the industry have been dedicated to redefining machine design, with particular emphasis on scaling up the size of laser powder bed fusion machines. The sustained expansion of AM has engendered a necessity for novel manufacturing methodologies on a grand scale. This has, in term amplified the need for enhanced processing, reliability and underlining the need for machine designs specifically tailored to the intended part application, especially for the production of large parts or substantial quantities.

In response to this growing requirement for larger components, heavy industry has come to appreciate the design flexibility that laser powder bed fusion (LPBF) technology can offer. Companies such as AMCM have unveiled their cutting-edge m-8K printer, with a 5-tonnes capacity powder bed and an expansive build chamber measuring 800 x 800 x 1200mm. Concurrently, Bright Laser Technologies (BLT) has mad strategic investments in multi-module LPBF machines incorporating up to 20 laser modules thereby illustrating the industry's pursuit of ever-more ambitions print volumes.

A3D's Mutlit Concurrent Printing process (MCP) technology stands as a noteworthy complement to, and beneficiary of, this focus on larger AM machines. Unlike other printer providers who rely on a layer-by-layer approach, traversing these expansive beds with re-coaters at a sedate pace, A3D's MCP technology introduces a revolutionary simultaneous powder laying process. This distinctive offering opens avenues for innovative possibilities within AM, further propelling the technology into novel and emerging applications. A3D's status as the exclusive holder of the simultaneous powder laying patent places the Company in a pivotal position to enhance productivity in the realm of large-format 3D printing.

The fusion of MCP with laser powder bed fusion processes within the AM domain aspires to become the preferred manufacturing method across various critical sectors, including aerospace, energy, automotive and healthcare. This integration seeks to optimise the production of high-performance components such as rocket nozzles, medical implants, or even gas turbines. As we look forward to the future, it becomes evident that this synergy is poised to redefine the landscape of additive manufacturing.

MCP Patents

Patents granted to the Company protecting the MCP intellectual properties are held in numerous regions worldwide, including US, China, Japan, Great Britain, France, Netherlands, Germany, Canada, and Australia. The intellectual properties defining MCP are well supported by our patenting processes, and we continued to pursue further inventions which support these core MCP patents.

Ends
Approved for release by the Company's Board of Directors.
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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