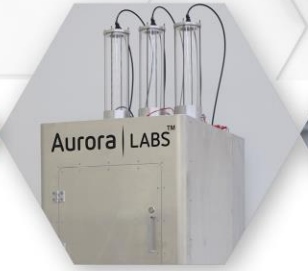
Aurora | LABS™

CORPORATE UPDATE: FEBRUARY 2018

WHAT DO YOU WANT TO BUILD TODAY?

CUTTING EDGE TECHNOLOGY ENABLING OPPORTUNITY

AURORA IS AN INDUSTRIAL TECHNOLOGY AND INNOVATION COMPANY THAT SPECIALISES IN THE DEVELOPMENT OF 3D METAL PRINTERS, POWDERS AND DIGITAL PARTS AND THEIR ASSOCIATED TECHNOLOGY.



www.auroralabs3d.com

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CORPORATE SNAPSHOT

Market Capitalisation and Enterprise Value[1]

Quoted Ordinary Shares on issue	no.	26,357,075
Restricted Ordinary Shares on issue	no.	32,260,696
Total Ordinary Shares on issue	**no.**	**58,617,771**
Share price (8 Feb 18)	A$/share	0.88
Market Capitalisation	**A$m**	**51.6**
Debt (as at 31 Dec 17)	A$m	-
Cash (as at 31 Dec 17)	A$m	2.7
Enterprise Value	**A$m**	**48.9**

Share Price / Volume History (A$; millions)

Top Shareholders (8 Feb 2018)

Name	Share Held	% of Shares on Issue
David Budge	23,946,785	41.1%
Gasmere Pty Ltd	2,817,888	4.8%
William Crisp	1,463,415	2.5%
Jessica Snelling	1,330,377	2.3%
Top 20 Shareholders	**38,439,942**	**66.0%**
Held by Directors and Management	**26,667,425**	**45.8%**

Directors and Senior Management

Name	Position
Paul Kristensen	Independent Non-Executive Chairman
David Budge	Managing Director
Nathan Henry	Executive Director, Director of Marketing and Business Development
Mel Ashton	Independent Non-Executive Director
Mathew Whyte	Non-Executive Director & Company Secretary
Steven Daw	General Manager

Notes:
1. Excludes options and performance shares outstanding.
Source: As at 8 February 2018, Company Announcements.

CORPORATE UPDATE

Aurora Labs (ASX: A3D) is an industrial technology company which specialises in the development of 3D metal printers, powders and digital 3D metal printed parts

Aurora has developed two core technologies:

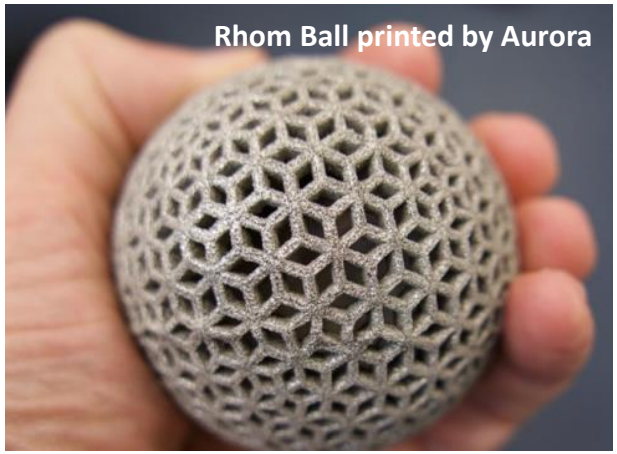
Large Format Technology with its Medium and Large Format Printers ("MFP" and "LFP")

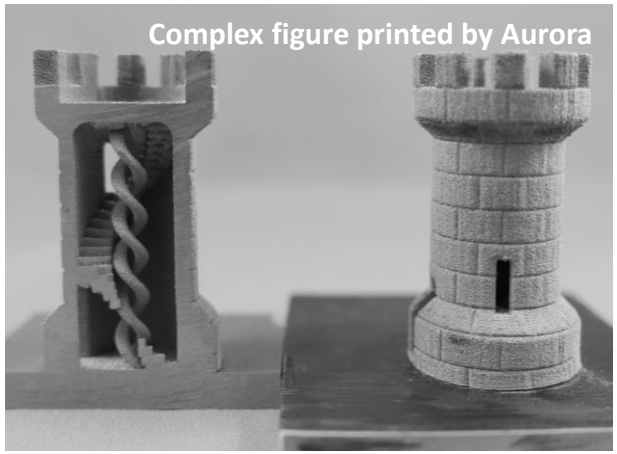
- Under development
- Achieved Simple Parts Slowly 8th Feb 2018
- Targeting pre-production Beta testing in 2018
- Targeting capability to print parts up to 1 tonne in 24 hr

Small Format Technology with its S-Titanium and S-Titanium Pro Small Format Printers ("SFP")

- In commercial production
- Now selling

Aurora's aim is to transform how metal parts and products are manufactured


Rhom Ball printed by Aurora


Complex figure printed by Aurora

AURORA'S PRODUCT DEVELOPMENT SUITE

- Aurora is continuing to commercialise its SFP, with the cash received from sales used to assist with funding the development of the MFP and LFP
- Aurora believes there is a significant market opportunity with its MFP and LFP to potentially replace a number of traditional and large scale metal manufacturing machines and technology, with its printers targeted to have the ability to produce complex metal based 3D printed parts in an extremely rapid time
- LFP is targeted to have the capability to print approximately 100 times faster than existing 3D printers on the market
- MFP and LFP expected to be highly beneficial to a number of industries, including mining and oil & gas, subject to successful completion of development and testing

Aurora Product Development Suite	Units	Small Format	Medium Format	Large Format
Max Printing Speed	cm^3/hour	17	1,500	15,000
Build Chamber Size	cm^3	20,000	8,000	5,600,000

Source: Company Estimates.

SMALL FORMAT PRINTERS

S-Titanium Pro Small Format Printer

Aurora is focused on the sales of its S-Titanium and S-Titanium Pro SFPs

The SFP is well placed to compete in the small printer segment of the 3D metal printing market on specifications and price

- The machine prints in three modes: Direct Metal Laser Sintering (DMLS), Direct Metal Laser Melting (DMLM) and Directed Energy Deposition (DED)
- The print bed is one of the largest on the market at this price point

The Company has agreements in place with distributors to advance the marketing and commercialisation of existing SFPs:

- Distributors receive a portion of the sales revenue of the SFP list price and Aurora receives net revenue from the sale

The price per unit varies by region but is currently US$49,999 ex Australia. Units sold through a distributor will receive less revenue for Aurora due to the distributor's share of revenue

RELATIVE MARKET POSITIONING – SFP / LOW SPEED PRINTERS

- Aurora's SFP continues to be well positioned in the global 3D printing market
- SFP remains competitive both on cost and specification compared to other existing comparable 3D printers on the market
- SFP currently retailing for US$49,999 compared to a large number of existing comparable 3D printers on the market which are priced >US$200,000 per unit
- Aurora is continuing to focus on sales of the SFP and presently has inventory that it is selling, predominately via distribution sales
- Sales of SFP expected to be used to assist with funding the development of the MFP and LFP

3D Printing Market (Low Speed Printers)[1]

Price, Speed, Build Volume and Resolution

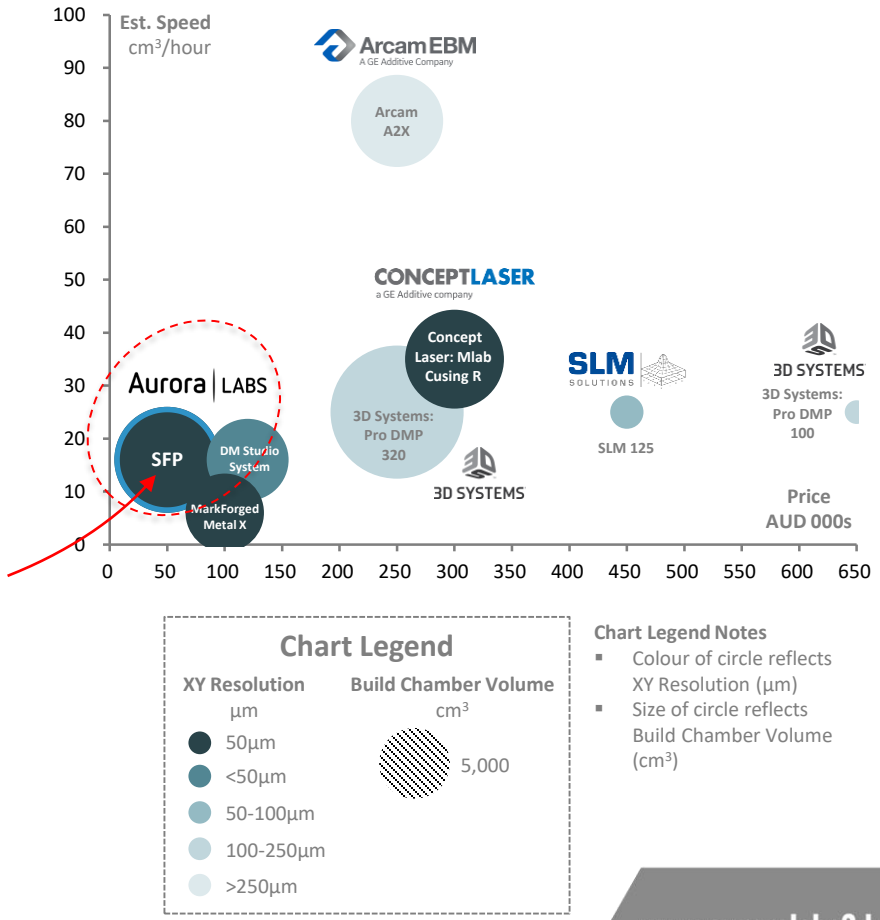


Chart Legend

XY Resolution µm	Build Chamber Volume cm³
50µm	5,000
<50µm	
50-100µm	
100-250µm	
>250µm	

Chart Legend Notes

- Colour of circle reflects XY Resolution (µm)
- Size of circle reflects Build Chamber Volume (cm³)

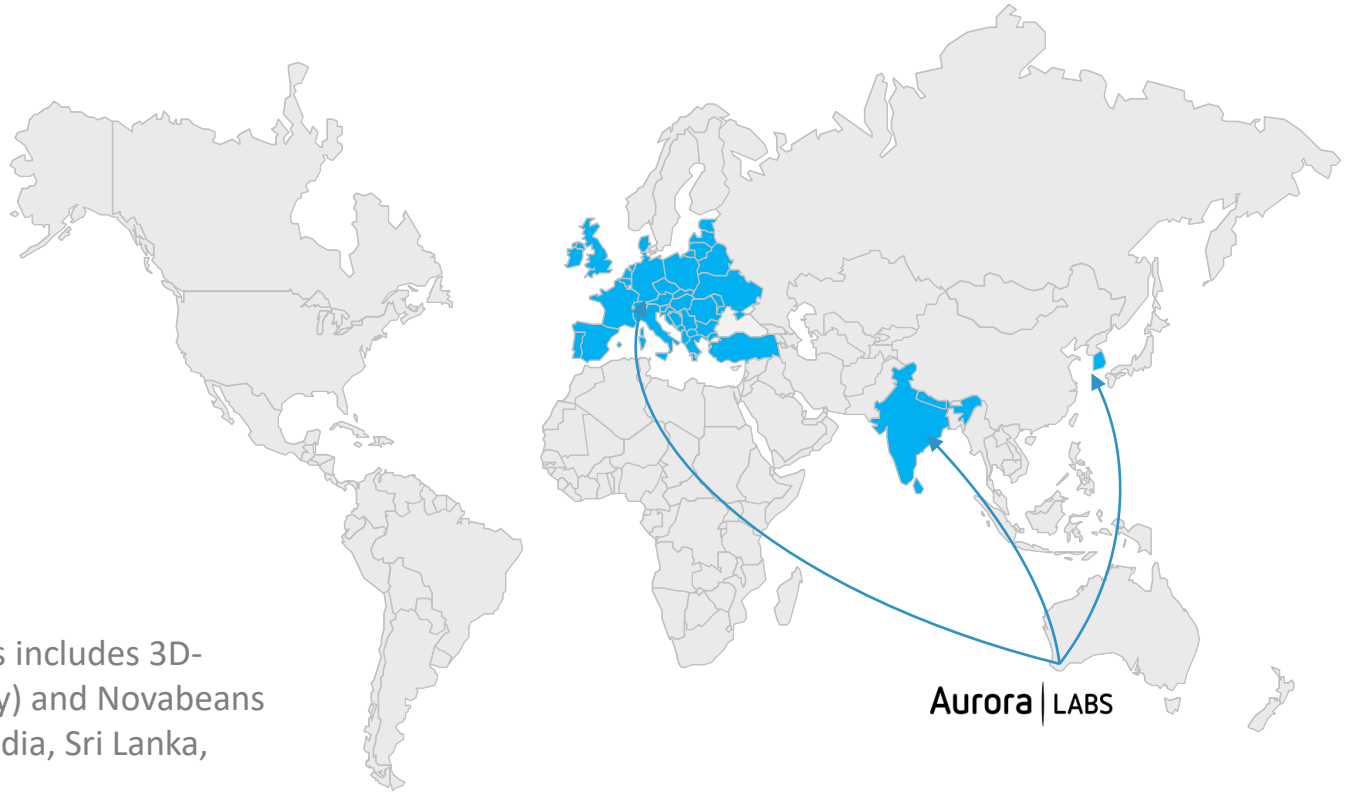
Notes:

1. A3D company research - illustrative only.

Source: Respective Company Estimates.

EXPANDING OUR SFP DISTRIBUTOR NETWORK

- Aurora has various global distributor agreements in place that will advance the marketing and commercialisation of the small format printer
- Recent distributor agreement signed with Partners Lab in September 2017, granting Partners Lab exclusive rights to sell, service and maintain Aurora's S-Titanium SFP in South Korea
- Other distributor agreements includes 3D-Mectronic (covering Germany) and Novabeans Prototyping Labs (covering India, Sri Lanka, Nepal and Bhutan)
- Aurora continues to work with a view to developing its overseas distributor network in order to generate indirect sales of its SFP



EVOLUTION OF THE TECHNOLOGY FOCUS

- Aurora finished the 2017 calendar year strongly with direct and distributor SFP sales improving. The 2018 sales pipeline is positive with a number of new distributors under negotiation

- Whilst Aurora considers that the SFP is a superior product to other devices targeting the same smaller scale build space, the truly significant commercial opportunity is within the large format technology and large scale manufacturing sector, both because of the higher price point and much larger markets

- Therefore, over time, the Company will focus more on its MFP and LFP given the remarkable opportunities available to Aurora in the large scale manufacturing space

Assembly of SFPs


Complex parts printed by Aurora

RELATIVE MARKET POSITIONING – LFP AND HIGHER SPEED PRINTERS

- Aurora's LFP is targeted to produce complex metal based 3D printed parts in an extremely rapid time
- Currently there is no global competitor that has a printer which combines the LFP's targeted print size with its targeted speed and precision
- Successful commercialisation of a high speed 3D metal printer has the potential to cause a major disruption to global metal manufacturing and the global flow of goods
- Aurora is currently prototyping its LFP (and MFP) with the aim of getting an operational pre-production LFP to print complex parts at rapid speeds during 2018
- The LFP technology is completely different from the SFP technology

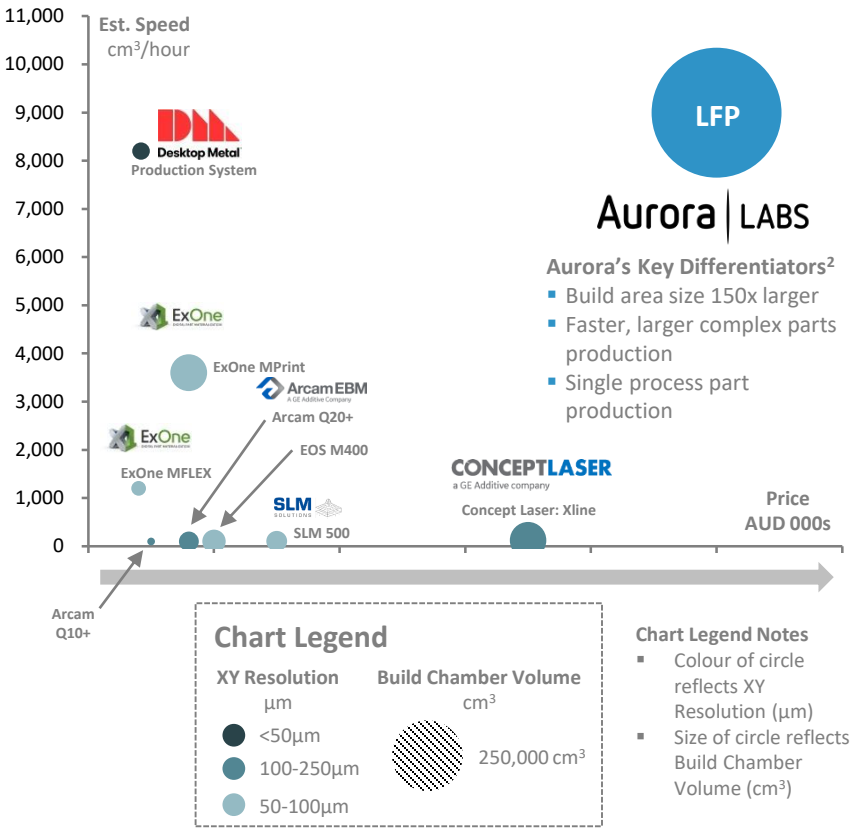
Bloomberg

"How 3-D Printers could erase a quarter of global trade by 2060"

Bloomberg[3] (4 Oct 2017)

3D Printing Market (Higher Speed Printers)[1]

Price, Speed, Build Volume and Resolution



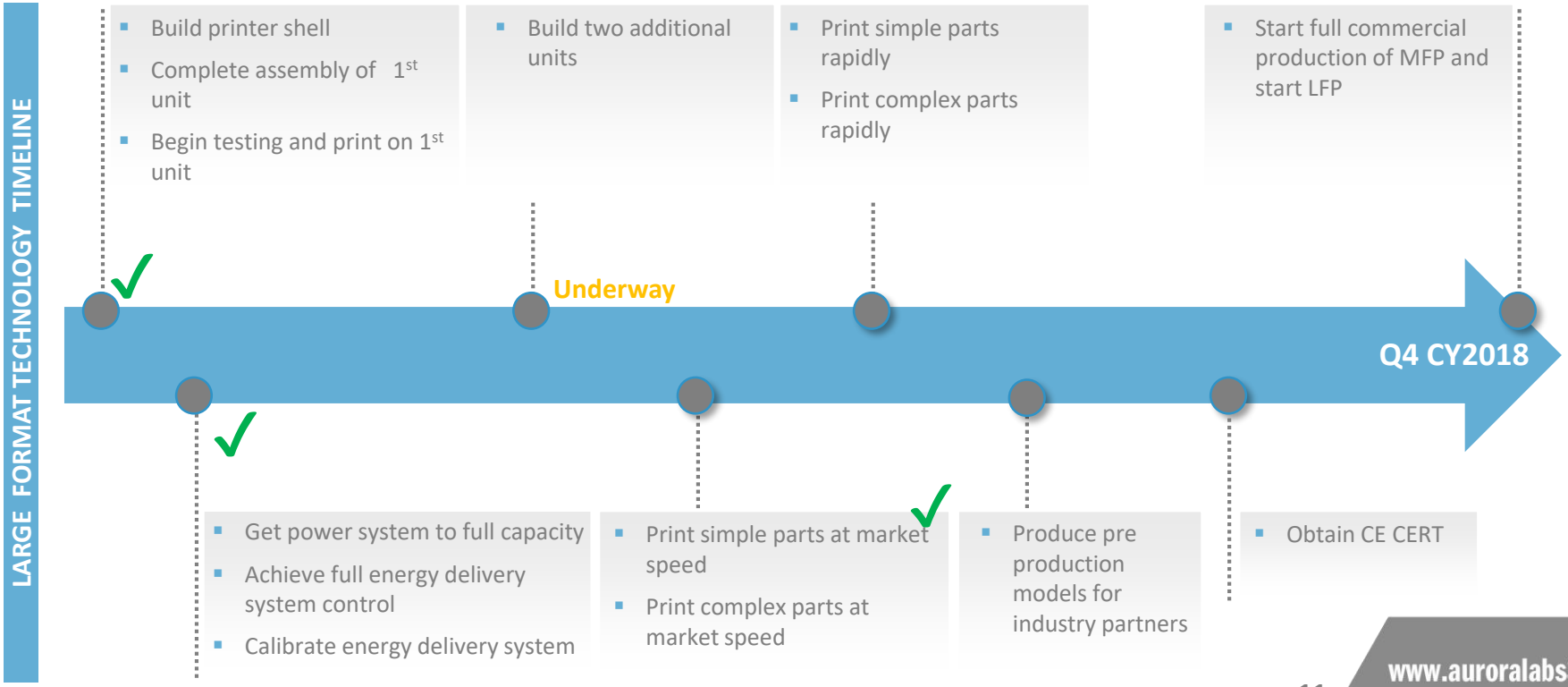
Notes:

1. A3D company research - illustrative only.
2. The Aurora MFP / LFP is expected to produce fully dense parts in one stage, in excess of 150 times the size of the Desktop Metal build area.
3. https://www.bloomberg.com/news/articles/2017-10-03/how-3-d-printers-could-erase-a-quarter-of-global-trade-by-2060

Source: Respective Company Estimates.

LARGE FORMAT TECHNOLOGY DEVELOPMENT TIMELINE

- Aurora's indicative timeline for the development of its Large Format Technology is set out below. These printers use new revolutionary technologies beyond the SFP
- Steps below are envisaged to be completed over the next 11 months, but are subject to inherent risks factors associated with design and development
- While this timeline is an indication of progress, investors need to be made aware that this type of Research & Development work will have periods of rapid progress and periods of slower progress



Source: Company Estimates.

LARGE FORMAT TECHNOLOGY DEVELOPMENT

Two Additional Units

The two additional units referred to in the timeline are as follows;

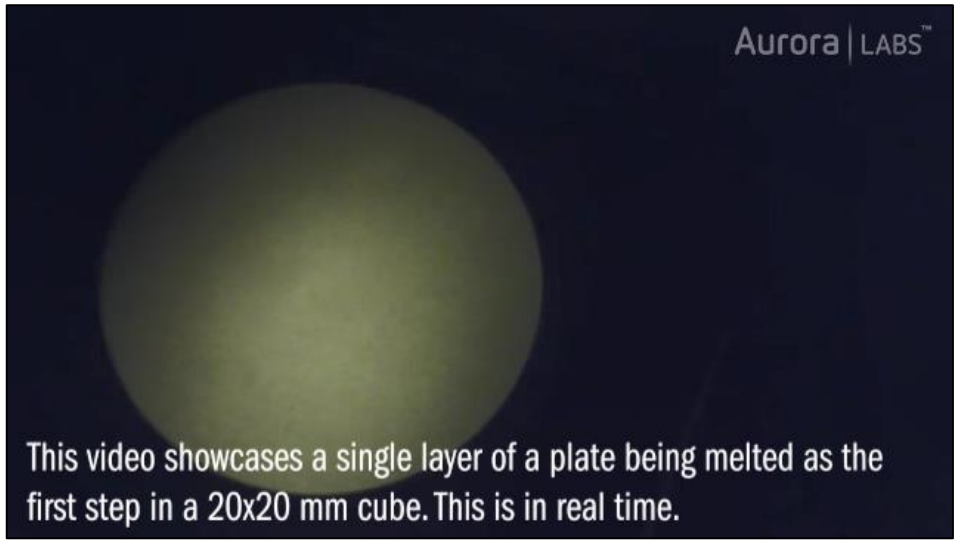
- Unit 1 is a second proof of concept machine to speed up the testing process
- Unit 2 is the first of the pre-production models of the medium format printer that Aurora will be taking to trade shows

ADVANCEMENT FOR LARGE FORMAT TECHNOLOGY

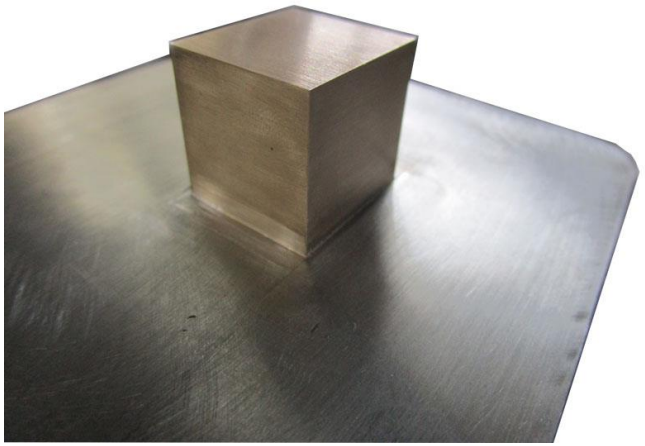
Aurora recently announced advancements with the development of its Large Format Technology, with its prototype now able to print simple parts at market speed. Market speed in this context is defined as a rate comparable to existing technology in the market, but a fraction of the speed of the Large Format Technology.

This is a critical milestone for Aurora as it indicates that all the key components of the Large Format Technology have been proven at a fundamental level, and will ultimately allow for the development of the Medium and Large Format Printer (MFP / LFP).

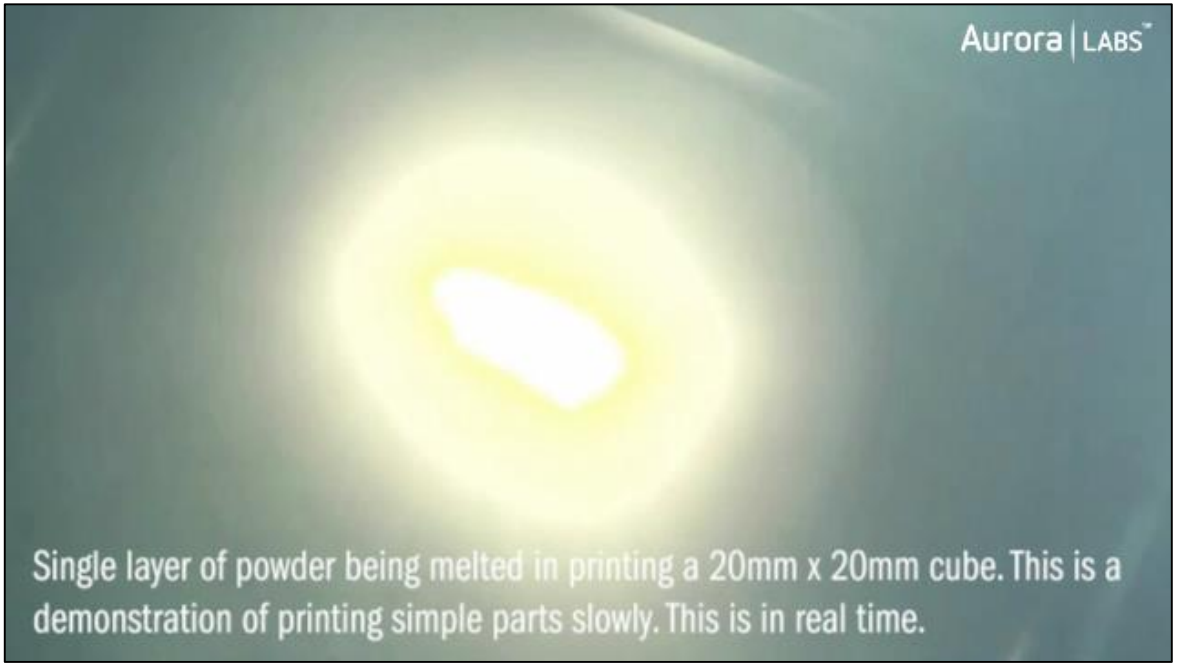
The following video showcases a single layer of a plate being melted as the first step in a 20x20 mm cube. This is in real time.



[Watch video here: https://a3d.am/sps1](https://a3d.am/sps1)



Post-processed test samples which show the extremely high density achieved with the process, very close to 100%.



This video shows a single layer of a 20 x 20mm cube being printed at speed.
The print was filmed in real time and was printed at the slowest possible speed as a necessary first step.

[Watch video here: https://a3d.am/sps2](https://a3d.am/sps2)

Progression of simple parts printed slowly on the MFP / LFP Proof of Concept Printer

Progress towards simple parts rapidly

Since the release of this video, the print speed has increased by a factor of 10

POWDER PRODUCTION UNIT (PPU)

Aurora expects that its powder production prototype will be completed and commencing testing within the quarter.

- The prototype PPU is designed with the intention of demonstrating the technology for producing very high quality powders that are lower in cost to existing processes
- Following successful testing, Aurora intends to build a full sized PPU capable of producing up to 5 tonnes per day of powder during 2018
- Powder can be sold into international markets sized in the billions of dollars
- A single PPU could potentially produce $100k-$500k of powder per day

INDUSTRY PARTNER PROGRAM

Aurora has launched an Industry Partner Program to identify and collaborate with potential partners in relevant sectors and drive the adoption of the MFP and LFP.


Titanium Valve Body printed by Aurora

Industry partners will be given the opportunity to obtain:

- Early access to Aurora's Large Format Technology, which will include:
  - Opportunity to evaluate Aurora technology and assess fit with partners business
  - Ability to print parts on early stage machines to begin qualification of printed materials
  - Invitation to the first viewing of the Large Format Technology in operation

- Be part of the Company's beta testing program and purchase of a pre-production model machine - allowing companies to commence their own printing program

- Tailored R&D Programs - with the goal of delivering a complete production process for the manufacture of parts

Aurora is in discussions with a number of potential industry partners and will provide regular updates on the development of the Program over the coming months. Throughout this verification process, the Company aims to develop a clear understanding with industry partners of the timelines and pathways to market associated with the development, testing and commercial release of Aurora's ground-breaking 3D printing technology. This program matches many of the same opportunities underway with WorleyParsons, as previously announced.

BINDING TERM SHEET WITH WORLEYPARSONS

Aurora has signed a binding term sheet to establish an Additive Manufacturing Solution Centre with WorleyParsons

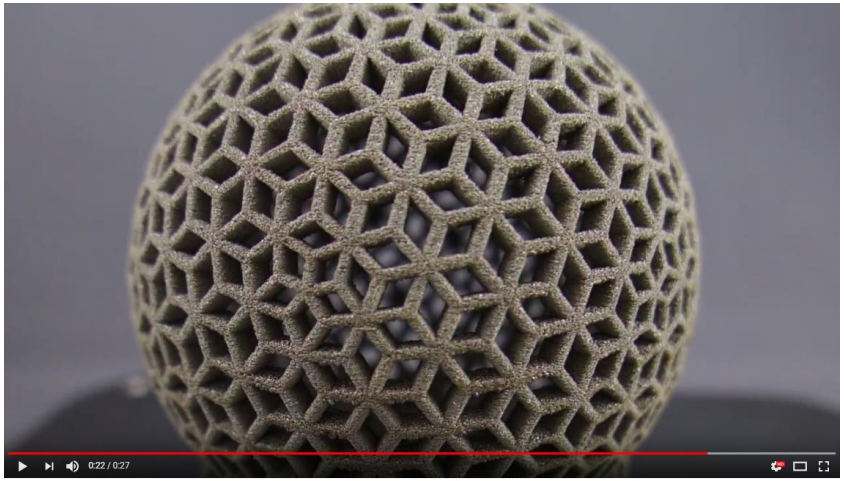

316L Pump Impeller printed by Aurora

The Solution Centre will focus specifically on:

- Licensing and distribution of Aurora's 3D metal parts printers
- Design and certification
- Creation of a Print Bureau using Aurora Labs' technology
- Explore option for bulk powder production

The Solution Centre plans to introduce 3D printing to major infrastructure, mining and other resource companies globally and to provide those companies with a competitive advantage over the general market through expert use of key technologies

YouTube video: S Titanium Pro 316L Rhoms Ball



RELATIVE MARKET VALUATIONS

- Aurora is currently valued at a fraction of competing 3D printing companies
- Strong recent activity in the sector such as Desktop Metal raising US$115m in venture funding from investors such as Google Ventures and GE Ventures at an estimated valuation of >US$1 billion (Jul 2017)
- No equivalent competitor with similar technical specifications to Aurora's LFP technology (under development)

Company	Aurora | LABS	TITOMIC	ExOne	SLM SOLUTIONS	CONCEPTLASER a GE Additive company	stratasys	ArcamEBM A GE Additive Company	3D SYSTEMS	Desktop Metal
Listed or Private	Public	Public	Public	Public	Private	Public	Public	Public	Private
Listing Location	ASX	ASX	NASDAQ	ETR	n/a	NASDAQ	Stockholm	NYSE	n/a
Stock Ticker	A3D	TTT	XONE	AM3D	n/a	SSYS	ARCM	DDD	n/a
Market Capitalisation (A$m)	**52**	**155**	**181**	**715**	**998[1]**	**1,084**	**1,142[2]**	**1,175**	**>1,250[3]**
Stage of Development	▪ Small commercial production (SFP) ▪ Development stage (MFP/LFP)	▪ R&D ▪ Pre-revenue ▪ Commercial development	▪ Medium size commercial production	▪ Medium size commercial production	▪ Commercial production	▪ Large scale commercial production	▪ Commercial production	▪ Large scale commercial production	▪ Pre commercial production

Notes:

1. Based on GE's acquisition of 75% of company for US$599m.
2. Based on GE's acquisition of 75% of company for US$685m.
3. Based on private valuation as per Pitchbook website.

Source: Based on company data as at 8 Feb 2018.

INVESTMENT HIGHLIGHTS

1. Metal manufacturing is a multi trillion global market[1]
2. Clear commercialisation and growth strategy
   - A. Medium and Large Format Printer technologies under development and achieving milestones
   - B. Targeting cooperation with Industry Partners
   - C. International distributors in place for the commercialisation of the SFP

Notes:

1. The Business Research Company, Metal Manufacturing Global Market Briefing 2016.

APPENDIX

GLOBAL 3D PRINTING TECHNOLOGIES

- Our SFP machine prints in three modes: Direct Laser Metal Sintering ("DLMS"), Direct Metal Laser Melting ("DMLM") and Directed Energy Deposition ("DED")
- Large format technology uses a completely new technology that allows our system to print at much higher speeds

3D Printing Technology	Description	Example Competition 3D Printers
Selective Laser Melting (SLM)	▪ Powder is deposited layer by layer onto a build bed and selectively melted with a laser, fusing the loose powder to the layer below to create a solid part	▪ Concept Laser X-Line ▪ EOS M400
Electron Beam Melting (EBM)	▪ Powder is deposited layer by layer onto a build bed and selectively melted with an electron beam, fusing the loose powder to the layer below to create a solid part	▪ Arcam Q20+
Directed Energy Deposition (DED)	▪ Powder or wire feedstock is extruded through a print nozzle and melted by a laser or electron beam, with both print nozzle and print bed moving to create a three dimension part	▪ Sciaky EBAM
Binder Jetting	▪ Powder is deposited onto a build bed then selectively sprayed with binding agent to form a solid part ▪ The 'green' part is then sintered in a furnace to remove the binding agent	▪ ExOne M-Flex ▪ Desktop Metal Production
Nano Particle Jetting	▪ Metal is reduced to nano-particles and blended with a liquid jetting agent ▪ Liquid metal-agent blend is jetted on to the build platform in a heated chamber, which evaporates the jetting agent, leaving sold metal	▪ XJet
Cold Spray Printing	▪ Metal powder is accelerated and fired at a build plate at extremely high velocity ▪ High velocity impact binds metal particles to build plate, with object being made up of multiple layers	▪ LightSPEE3D ▪ Titomic

Source: Company Research.

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CORPORATE UPDATE: FEBRUARY 2018

WHAT DO YOU WANT TO BUILD TODAY?

THANK YOU FOR YOUR INTEREST

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