

Emerging Stocks Down Under

凸 In every block of marble, I see a statue. ワワ

- Michaelangelo (1475-1564), Italian architect, artist and poet



AML3D Down to the wire

AML3D

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Stocks Down Under rating: $\star \star \star \star$

ASX: AL3 Market cap: A\$14.7M 52-week range: A\$0.052 / A\$0.18 Share price: A\$0.079

At the moment you need a magnifying glass to see the market capitalisation of AML3D, the 3D printing company from Adelaide. We see potential for that to change, because this company's Wire Additive Manufacturing technology is starting to get used in all sorts of interesting applications. Look for more announcements like that from 26 October, where it was revealed that AML3D-made parts are going into Australian Navy ships.

Share price chart



Source: Tradingview

The next manufacturing revolution

Doubtless you've heard by now of 3D printing, or 'additive manufacturing', the manufacturing approach that uses computer-aided design to build objects one layer at a time. Additive manufacturing is going to revolutionise manufacturing in the decades ahead. Once upon a time, to make something, you needed a big plant to cast, forge, roll and machine the metal into the shape you want, after which the part needed to be warehoused and shipped to its end user.

Call that 'subtractive manufacturing' because you start with a certain amount of metal and then cut bits and pieces out it. With additive manufacturing you don't have to cut back and can therefore use something like 80% less starting material. More importantly, with additive manufacturing you don't really need supply chains anymore, so printing the part locally cuts out a lot of the in-between steps. And the in-between costs.

Wire or powder? Wire's better

AML3D's take on additive manufacturing is called 'Wire Additive Manufacturing', or WAM for short. The 'wire' part refers to the use of metal wire as the raw material. In Wire Additive Manufacturing an electric arc melts the wire so that it can be deposited layer on top of layer by a robotic arm. Sounds like welding, right? Indeed, as with welding, an inert gas is used to prevent oxidation and improve or control the metal's properties. People

have been doing Wire Additive Manufacturing of some kind for a long time now. What got AML3D up and running with a differentiated technology suite was software created by founder Andy Sales to fully automate the Wire Additive Manufacturing process, and the inclusion of that software into medium to large scale metal 3D printers which are being sold under the brand name 'Arcemy'. Sales even filed for patent protection over aspects of the technology (see WO/2019/195877) and in late 2022 patent grants are expected sooner rather than later.

'Big deal', we can hear many of you saying. How is AML3D's technology any different from that of Titomic (ASX: TTT), or Amaero (ASX: 3DA), or Aurora Labs (ASX: A3D)? Or any other 3D printing hopeful? Well, we think AML3D is worth paying attention to because with Wire Additive Manufacturing you get more metal laid down, faster, and with more density, than with powder, which is what a lot of 3D printing companies are using. Indeed, we may find out as the 3D Printing Revolution gains pace that Wire Additive Manufacturing becomes the industry standard for these reasons. Time will tell.

Thanks to Lloyd's and BAE

The key to success for a company like AML3D is adoption of its technology. AML3D is still more or less a start-up company in terms of revenue eight years after its founding, as are many of its additive manufacturing peers on the ASX.

But today, AML3D has two important advantages on terms of credibility. One is its inclusion on Lloyds Register. You've probably heard that venerable name before. Lloyd's Register started life in 1764 as a Register of Ships that helped give underwriters and merchants an idea of the condition of the vessels they insured and chartered. What Lloyd's Register evolved into was a standards organisation that classified and certified both ships and important components and accessories on those ships such as cables, ropes, and anchors. In 2019 Lloyd's Register awarded to AML3D the Register's first ever qualification certificate for an additive manufacturing facility focused on wire-arc technology. That meant AML3D was 'inside the tent' in terms of parts made using its WAM technology being acceptable in all things maritime. Being ISO9001-certified in terms of its quality system was one thing, but getting on Lloyd's register was another more valuable thing entirely.

AML3D's second advantage in terms of credibility is the fact that it's gradually picking up early users. In FY22 the company gained A\$2m in revenue from various Arcemy installations, sales to ThyssenKrupp and Baker Hughes, and usage by various other unnamed companies in the oil and gas, defence, aerospace and maritime sectors. On 26 October 2022 AML3D announced that it had secured a contract with BAE Systems to supply parts that will go into nine Hunter class frigates for the Royal Australian Navy. BAE Systems is a very nice supporter for AML3D to have. This London-based company (LSE: BA) isn't just any defence contractor, it's Europe's largest, with £21.3bn in 2021 revenue and £2.2bn in underlying EBIT.

Bring on 2023

We think next year will feature more announcements like the recent BAE contract. Now that Covid-19 is ancient history, AML3D management is well placed to travel and meet with potential customers. And the company is now pushing harder on the revenue front, with Ryan Millar being named as the new CEO in October 2022 in favour of founder Andy Sales, who is now Chief Technical Officer. Millar has a long track record of growing technology ventures at placed like HP. The customers Millar and his colleagues will be talking to all have money to spend – the oil and gas players because energy prices are high, the defence and aerospace players because the world has become a dangerous place and everywhere you look defence budgets are being increased.

AML3D stock hasn't done anyone any favours since the September 2020 high of 57 cents. The BAE announcement and the recent leadership change suggest this one warrants some watching, particularly now that the 2022 bear market for tech stocks seems to be coming to an end. For investors with some risk appetite, this one is four stars.



Pitt Street Research Pty Ltd

3 Spring Street, Sydney, NSW 2000, Australia



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