
Amaero Completes Qualification of Niobium C103 with ADDMAN

- Amaero completes qualification of C103 AM powder to ADDMAN Group and its subsidiary Castheon's technical specifications.
- Positions Amaero as the largest capacity and most responsive U.S. domestic producer of C103, refractory and specialty alloy powder for additive manufacturing.
- Amaero's successful qualification of C103 AM powder triggers ADDMAN's offtake obligation with 0.25 tonnes expected to ship in CY2024 and 2.0 tonnes expected to ship in CY2025.
- The qualification commences a five year preferred supplier agreement whereby Amaero will be the primary supplier of C103, refractory and titanium alloy AM powder to ADDMAN Group and its subsidiaries, including Castheon and Keselowski Advanced Manufacturing. Expected future sales are material to Amaero's revenue; moreover, the attributable revenue is a key assumption underpinning Amaero's expectation that it will achieve EBITDA breakeven in FY2026.
- Amaero Chairman and CEO, Hank Holland, will host an investor briefing on Monday, September 9 at 12:00pm AEST.

Amaero International Limited (ASX:3DA) ("Amaero" or "the Company") is pleased to announce that it has completed the qualification of Niobium C103 in accordance with ADDMAN Group and its subsidiary Castheon's technical specifications. Since announcing the strategic offtake and preferred supplier agreement on March 27, Amaero and ADDMAN moved deliberately. Commissioning of the atomizer was completed ahead of guidance and delivery C103 AM powder to ADDMAN for testing was completed ahead of guidance. The achievement of qualification with a leading technical and manufacturing authority, and doing so ahead of guidance, is Amaero's most significant milestone. With qualification having been achieved, Amaero is now the largest capacity and most responsive U.S. domestic producer of C103, refractory and specialty alloy powders for additive manufacturing.

As previously disclosed, Amaero entered into a binding offtake and preferred supply agreement for Niobium C103 additive manufacturing (AM) powder. This agreement was contingent on successful qualification according to the counterparty's specifications. The counterparty, ADDMAN Group, along with its subsidiaries Castheon and Keselowski Advanced Manufacturing (KAM), are owned by American Industrial Partners (AIP), a U.S.-based private equity firm with US\$17 billion under management. Castheon, under the leadership of Chief Scientist Dr. Youping Gao, is a leader in additive manufacturing of Niobium C103 and refractory alloys, primarily serving the defense and space industries. With over 20 years of experience in the traditional processing of C103 for space-borne products, including leading NASA-certified AM projects, Dr. Gao has played a crucial role in refining the use of C103. ADDMAN's recent combination of Castheon and KAM creates the largest U.S. domestic metal additive manufacturer with 50+ 3D printing machines and 300,000+ square feet of production capacity across multiple locations. The companies actively collaborate with U.S. Department of Defense-funded laboratories and major defense contractors on critical national security projects, including hypersonic and strategic missiles, space launch systems, and satellites.

Amaero's successful qualification of C103 AM powder triggers ADDMAN's obligation to purchase no less than 2.25 tonnes of C103 at a fixed price with 0.25 tonnes expected to be shipped in CY2024 and 2.0 tonnes expected to be shipped in CY2025. The attributable revenue is material to Amaero. Having had an entity with ADDMAN's technical authority and role in the market with defense primes and DoD-funded labs qualify its C103 AM powder, Amaero expects this will be looked upon favourably by other potential customers with whom it is speaking about potential new commercial agreements.

Further, the agreement establishes Amaero as the preferred and primary supplier of C103, refractory, and titanium alloy AM powders to ADDMAN Group including its Castheon and KAM subsidiaries. The preferred supplier agreement is for a period of five (5) years and does not establish a minimum order threshold. Amaero has confidence that its qualification in combination with its capacity and responsiveness will provide the foundation for Amaero to make additional future sales of C103 to ADDMAN. The expected future sales to ADDMAN are material to Amaero's revenue; moreover, the attributable revenue is a key assumption underpinning Amaero's expectation that it will achieve EBITDA breakeven in FY2026.

The Company engaged Fairmont Consulting Group to provide an in-depth analysis of the anticipated demand of C103 AM powder. The findings of the consulting report were summarized in an ASX announcement dated February 7, 2024 and the study estimated that demand for C103 AM powder would grow at 62% CAGR over 5 years with period ending demand in FY2028 estimated at 105 tonnes. Given ADDMAN's technical authority and its strong market share as a Tier 1 supplier to DoD-funded labs and defense prime contractors for additive manufacturing with C103 and refractory alloy powders, the Company expects that ADDMAN Group will have a leading market share and will participate significantly in the estimated 105 tonnes of C103 AM powder demand in FY2028.

Hank J. Holland, Chairman and CEO commented:

"Since I assumed the role of Chairman and CEO in October 2022, we have taken bold and decisive actions to position Amaero as a leading U.S. domestic producer of C103, refractory and titanium alloy AM powder. In order for additive manufacturing to achieve its potential, it's imperative that we create a more resilient, more scalable, and more responsive U.S. domestic supply chain for C103 and specialty alloy AM powder. And, time is of the essence.

Achieving qualification of C103 with ADDMAN Group and Castheon is a validating and transformative milestone. This strategic collaboration will play a crucial role in demonstrating manufacturing readiness and advancing the integration of additive manufacturing into the most vital and critical defense and space applications.

The agreement between ADDMAN Group and Amaero aligns leading organizations dedicated to advancing the commercial viability and adoption of additive manufacturing. This collaboration brings together Amaero's pioneering expertise in powder metallurgy and cutting-edge atomization technology with Castheon's and Dr. Youping Gao's industry-leading innovations in material science and additive manufacturing and with KAM's advanced manufacturing processes and scalable production capability.

The Amaero team looks forward to collaborating with ADDMAN to advance manufacturing readiness levels (MRL) and technical readiness levels (TRL) to enable broad insertion of metal additive manufacturing and to support the Department of Defense, DoD-funded laboratories, and defense prime contractors to progress hypersonic and strategic missile platforms from development and demonstration phases to serial production. As these programs are highly strategic, generational investments and as programs are critical to national security, Amaero and ADDMAN are committed to prioritizing support for the DoD, its laboratories, and defense prime contractors.

Lieutenant General (retired) H.R. McMaster, Special Advisor to Chairman and CEO commented:

“Amaero has acted with a sense of urgency to relocate its business to the United States, to attract a leading technical and manufacturing team, and to prioritize production of C103 and refractory alloy AM powders. These were vital efforts to address critical vulnerabilities in U.S. defense and national security supply chains and will help advance hypersonic and strategic missile programs to serial production. Amaero’s scalable production of C103 and refractory alloy powders and Castheon’s leadership position in material science and additive manufacturing demonstrate that it is possible to use cutting-edge technologies to re-shore and scale critical industrial base capabilities that are atrophied to a dangerous level.”

Joe Calmese, CEO of ADDMAN Group commented:

“To fully unlock the potential of additive manufacturing, we need to improve the scalability and responsiveness of U.S. production for C103 and specialty alloy AM powders. Amaero’s commitment to these priorities, along with their collaboration with ADDMAN Group and the broader U.S. defense ecosystem, will significantly accelerate the adoption of additive manufacturing and drive important advancements in materials and manufacturing.”

Investor Briefing

Amaero Chairman and CEO, Hank Holland will host an investor briefing on Monday, September 9 at 12:00pm AEST. The investor briefing will be recorded and posted to Amaero’s website.

To pre-register for the briefing, please use the link below:

https://janemorganmanagement-au.zoom.us/webinar/register/WN_1U_qX56NTpOGUYF1RWE7g

This announcement has been authorized for release by the Board of Directors of the Company.

About Amaero

Amaero International Limited (ASX:3DA) is an ASX-listed company with manufacturing and corporate headquarters located in Tennessee, USA. Amaero is a leading U.S. domestic producer of high-value C103, refractory alloy, and titanium powders for additive and advanced manufacturing of components utilized by the defense, space, and aviation industries. The technical and manufacturing team brings decades of experience and know-how with pioneering work in gas atomization of refractory and titanium alloys. The company has commissioned advanced gas atomization technology with an industry leading yield of AM powder. The company is also a leader in Isostatic Powder Processing (IPP) manufacturing of large near-net-shape powder metallurgy parts with forged-equivalent material properties and microstructure for a variety of alloys. IPP is helping alleviate the strained domestic supply chain for castings and forgings of large components.

<https://www.amaeroinc.com>

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