

ASX Release

11 March 2021

## Agreement with Rio Tinto to collaborate on alloy for 3D printing

### Highlights

- **Amaero and Rio Tinto to collaborate on the development of the supply chain for Amaero's high performance, High Operating Temperature Aluminium Alloy, "Amaero HOT Al".**
- **Rio Tinto has recently commenced aluminium scandium production and will provide alloy billets to Amaero for processing into powder for 3D printing.**
- **Amaero and Rio Tinto aim to scale out production of Amaero HOT Al in both Australia, USA and internationally.**
- **Once commercialised, Amaero HOT Al will also be used in conjunction with Boron Nitride Nano Tubes under the Strategic Alloys JV. The Agreement aligns with Amaero's long-term strategy of expanding its offering through the commercialisation of a new generation of high performance alloys developed by Amaero and its research partners.**

Amaero International Limited ("**Amaero**"), (the "**Company**") (**ASX:3DA**), a leader in metal additive manufacturing, has entered into an Agreement to collaborate with Rio Tinto on the development of the supply chain for Amaero's high performance, High Operating Temperature Aluminium Alloy, "Amaero HOT Al".

Rio Tinto holds aluminium and scandium production capability and, under the Agreement, Rio Tinto will provide Amaero with alloy billets to be processed into powder for 3D printing.

**Commenting on the Agreement, Amaero CEO Barrie Finnin said:** "We are very pleased to enter into this Agreement with Rio Tinto. This is an important step in the commercialisation of this high performance aluminium scandium alloy that will be used in our breakthrough 3D metal printing technology. We look forward to working with Rio Tinto to progress the production of the alloy so we can commence the qualification process with key customers in the aerospace sector and other industries."

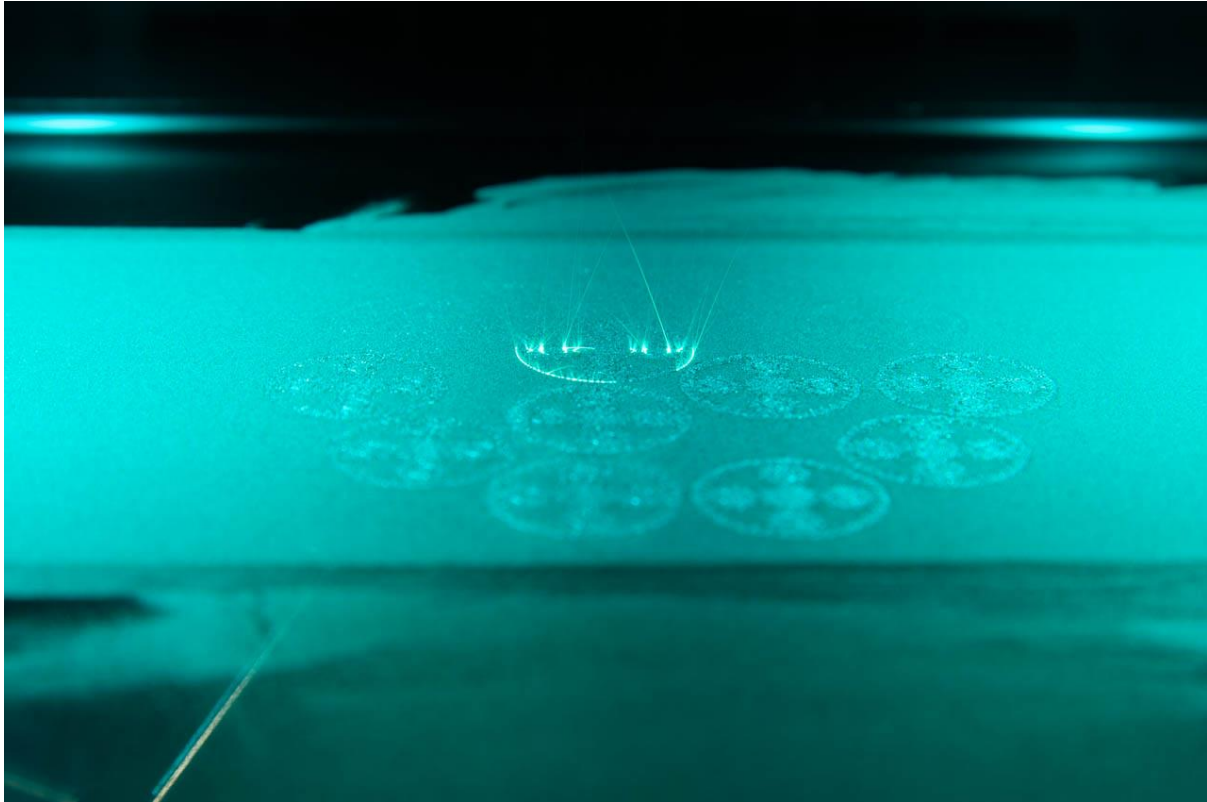
**Tolga Egrilmezer, Vice President, Sales and Marketing for Rio Tinto Aluminium commented:** "As a global leader in aluminium and the first producer of high-quality scandium oxide in North America, Rio Tinto is uniquely positioned to provide a secure source of aluminium-scandium alloy to the market. Aluminium-scandium alloy is the material of choice where a lightweight, high-strength material with thermal resistance and good welding properties is needed, such as for defence and aerospace applications. This first sale demonstrates our ability to develop products that meet our customers' needs, drawing on our technical expertise and world class assets."

Amaero HOT Al is a new high-performance aluminium alloy, with scandium and manganese alloying additions, resulting in 3D printed parts that can be directly aged (age hardening heat treatment), to yield superior strength and durability at high operating temperature.

Amaero holds exclusive global commercial licence rights to the patented alloy, developed by Monash University. In July 2020 the Company applied for broad international patent coverage for the new heat treatable aluminium alloy, which is now in the final approval stage, the national phase of the Patent Cooperation Treaty ("PCT").

Aluminium-scandium alloys have significant applications in the aerospace, defence and sports equipment industries, which includes the manufacture of tennis rackets, baseball bats, bicycle frames and multiple other applications, which rely on high performance materials.

The development and patent application aligns with Amaero's long-term strategy of expanding its offering through the commercialisation of metal alloys developed by the Company and our research partners. This is the second patented alloy and powder that Amaero holds exclusive global commercial license rights to.



*Image 1: Laser powder bed 3D printing*

### **Key Material Terms**

**Term of Agreement:** 3 years

**Intellectual Property:** Each party maintains its rights to its own intellectual property with Amaero granting Rio Tinto a limited sub-licence to its Scandium Alloy Patent, subject to conditions and warranties.

**Supply:** Amaero will exclusively source AlMnSc billet and AlSc master alloy products from Rio Tinto.

**Right of first refusal:** Upon expiration or termination (subject to conditions) of the Agreement and for a period of 3 years thereafter, Rio Tinto has the right of first refusal to continue supply to Amaero under the same terms and conditions, excluding price, of the Agreement.

**Forecast volume:** Over the term of the agreement, Rio Tinto will supply a forecast quantity of 60-75 tonnes of AlMnSc billet products at an estimated total value of >\$9 million. Amaero is required to accept the initial development order however subsequent volumes are subject to the material meeting the specifications of Amaero and Amaero's customers.

**Termination:** Standard termination clauses noting an additional clause that if Amaero is unable to meet minimum forecasted quantities in any relevant Contract Year, the Rio Tinto may terminate this agreement by written notice; however, Rio Tinto's right of first refusal provided for in Section 2(b) shall survive such termination.

David Hanna  
Chairman Amaero  
International Limited

This ASX release is approved by the Board of Amaero International Limited.

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About Rio Tinto Aluminium:

Rio Tinto is an industry leader in responsible aluminium production. In 2016, Rio Tinto launched RenewAl, the world's first certified low CO2 primary aluminium brand. It has helped to pioneer responsible production standards for the global industry as a founding member of the Aluminium Stewardship Initiative (ASI), becoming the first producer to offer ASI Aluminium in 2018. Rio Tinto also launched START, the first sustainability label for aluminium delivered to customers through blockchain technology, enabling them to differentiate between end products based on their environmental, social and governance credentials. Rio Tinto has developed an innovative process to extract high purity scandium oxide from the waste streams of titanium dioxide production, without the need for any additional mining at its ilmenite mine in Havre-Saint-Pierre, Quebec.

About Amaero International Limited:

Amaero International Limited is an Australian based company that manufactures large format complex components in metal with laser-based additive manufacturing processes, commonly known as 3D printing.

Amaero has worked with many of the world's leading manufacturers of aerospace and defence products in both an R&D and manufacturing capability and has a demonstrated ability to deliver aviation and military specification 3D printed alloy critical operation components.

Amaero was established with the support of Monash University in 2013 to take advantage of commercial opportunities identified by the Monash Centre for Additive Manufacturing (MCAM). Amaero is co-located with MCAM in Melbourne Australia. It operates two additional facilities, in Adelaide, South Australia, and El Segundo, California, USA.