

# Titomic Signs MoU with Sino Euro the Leading Titanium Metal Research Centre in China and Metal Powder Producer

- Sino-Euro to be distributor of Titomic Kinetic Fusion™ systems in China
- New metal powder to be developed for Titomic Kinetic Fusion™ systems
- Mou to secure exclusive supply of aerospace grade Titanium Powders for Titomic Kinetic Fusion™

**Melbourne, Australia 20<sup>th</sup> December, 2018**: Australian metal additive manufacturing (3D printing) Company Titomic Limited (ASX: TTT) ("Titomic" or "Company") today announced it has entered into a Memorandum of Understanding ("MoU") with Sino-Euro Materials Technologies of Xi'An Co. Ltd (Sino-Euro), a high-tech Chinese company specialising in the production of PREP spherical metal powder. The MoU commences with immediate effect for the supply of metal powders and Sino-Euro to be appointed as the distributor for Titomic Kinetic Fusion systems and customer support in China.

The MoU enables Titomic to work with Sino-Euro for the supply of plasma rotating electrode process (PREP) metal powders. Titomic has tested Sino-Euro's aerospace grade Titanium powders, produced by their PREP process, having evaluated them as meeting the highest quality and international standards for titanium powder. The potential cooperative research and development of new metal powders for the patented Titomic Kinetic Fusion™ (TKF) process will provide ongoing access to cutting edge material science and next generation super alloy powders for TKF systems.

Sino-Euro is a subsidiary of Northwest Institute for Non-ferrous Metal Research (NIN), a key national research center in China with more than 700 scientific innovations, 120 patents, over 8500 developed products and government cooperation with USA, Japan, Germany, France and Russia. Sino-Euro focuses on the R&D and application of high-end materials and powder preparation technologies and has more than 30 patents granted including setting up China's first Supreme Speed Plasma Rotating Electrode Process (SS-PREP) ™ spherical metal powder industrial production line.

The consumption of metals such as titanium alloys in China is primarily driven by the aerospace, chemical, power, desalination and automotive industries. In the aerospace industry alone Boeing predicts that with the growth in air passengers as a result of the rising middle class, the demand of aircraft will result in China accounting for 18% of the world's commercial airplane fleet by 2037.



Sino-Euro's Ms Cristina Cao, Mr. S.J. Liang, Titomic's Jeff Lang and Vahram Papyran, and Sino-Euro's Mr. Alex Zhao

# Titomic Managing Director, Mr. Jeff Lang commented:

"We chose to execute this MoU with Sino-Euro for supply of their high-quality Aerospace grade PREP titanium powders aligned with their 50+ years of material science research in titanium and super alloys.

This MoU will lead to Sino-Euro being appointed in early 2019 as the sales distributor of Titomic Kinetic fusion systems and Titomic customer support in China. Sino-Euro is well placed as the research leader in China for Titanium and super alloy technologies from within the world's second largest economy to represent Titomic's commercial growth strategies in the global market."

## Sino-Euro General Manager, Mr. S.J. Liang added:

"Titomic is driving new levels of industrial productivity in the manufacturing world with leading-edge machines, patented process and innovative materials. We are excited to partner with Titomic across the highlighted fields of cooperation to explore innovations in industrial scale additive manufacturing."

Sino-Euro's MoU with Titomic will bolster Titomic's existing R&D into material science, additive manufacturing capabilities and help Titomic develop more productive industrial scale additive manufacturing systems and consumables business for customers.

The Company's TKF process provides innovative capabilities for aerospace & defence, resources (oil & gas, petrochemical, mining), automotive, construction, medical, sporting and consumer goods organisations to produce next-generation quality products with improved performance characteristics. Titomic is the global leader in fully-automated digital metal manufacturing systems which compete with traditional manufacturing methods at comparable or reduced cost to deliver sustainable, industrial scale manufacturing.

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## About Sino-Euro Materials Technologies of Xi'An Co. Ltd (Sino-Euro):

Sino-Euro, based in Xi'An, China, set up China's first Supreme Speed Plasma Rotating Electrode Atomisation SS-PREP™ spherical metal powder industrial production line for the production of Titanium, high temperature preparation of spherical metal alloy powders, engine blades processing services, development and production of powder metallurgy parts and wire for additive manufacturing. Sino-Euro is a subsidiary of China's key research institute; Northwest Institute for Non-ferrous Metal Research (NIN). Sino-Euro has achieved international quality management system (ISO9001:2015), aerospace quality management system (ASD9100D),medical device quality management system (ISO13485 : 2003) and China's national military standards. For more information, visit : www.c-semt.com

#### **About Titomic Limited:**

Titomic (ASX:TTT) is headquartered in Melbourne, Australia. The company overcomes limitations of additive manufacturing (3D printing) for metals to manufacture complex parts without shape or size constraints. Titomic Kinetic Fusion™ offers manufacturing which enables speed-to-market, superior products with lower production inputs and using fewer resources for a more sustainable future.

Titomic systems can be customised to client requirements offering additive manufacturing advantages at industrial scale. Multiple robots can be utilised to scale up in both speed and size to compete with traditional subtractive manufacturing for industries such as aerospace, defence, resources (oil & gas, mining, industrial equipment), marine, construction, automotive and consumer & sporting goods.

Other benefits of the Titomic Kinetic Fusion technology include:

- Joining dissimilar metals and composites for engineered properties in a structure
- No heat-related oxidation or distortion issues when it comes to manufacturing large parts
- Reduced time to market with industry-leading deposition speeds

Titomic's business model involves providing clients with feasibility tests and manufacture of prototypes to work out the manufacturing costs of the product. Clients will be offered a licence to manufacture via Titomic Kinetic Fusion™ or choose to commission their own Titomic system. After the system sales, Titomic continues to support clients with powder and consumables supply, system upgrades, service and maintenance. For more information, visit: <a href="https://www.titomic.com">www.titomic.com</a>

### Forward-looking statements:

Certain statements made in this release are forward-looking statements and are based on Titomic's current expectations, estimates and projections. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," "guidance" and similar expressions are intended to identify forward-looking statements. Although Titomic believes the forward-looking statements are based on reasonable assumptions, they are subject to certain risks and uncertainties, some of which are beyond Titomic's control, including those risks or uncertainties inherent in the process of both developing and commercialising technology. As a result, actual results could materially differ from those expressed or forecasted in the forward-looking statements. The forward-looking statements made in this release relate only to events as of the date on which the statements are made. Titomic will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this release except as required by law or by any appropriate regulatory authority.