

ASX Release

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ASM CONFIRMS COMMERCIAL SCALABILITY AND DOUBLES EFFICIENCY OF METALLISATION PROCESS

Highlights:

- **ASM produced 120kg of titanium copper alloy (99.5% purity), confirming the commercial scalability of its innovative metallisation process.**
- **Improvements to ASM's metallisation process has doubled the metallic yield**
- **ASM continues to work collaboratively with Dongkuk R&S, on the potential to develop a full scale metal processing facility**

Australian Strategic Materials (ASX:ASM) (**ASM**) has successfully confirmed the commercial scalability of its innovative metallisation process with the production of 120kg of titanium copper alloy (99.5% purity) at its facility in Korea.

ASM's Ziron Tech team produced two 60kg runs of the titanium copper alloy at a rate equivalent to approximately 1,000kg per day. This result is significantly above the targeted 250kg per day production rate, outlined in the agreement between ASM and Dongkuk Refractories and Steel Co Ltd (DK R&S), announced on 2 November 2020.

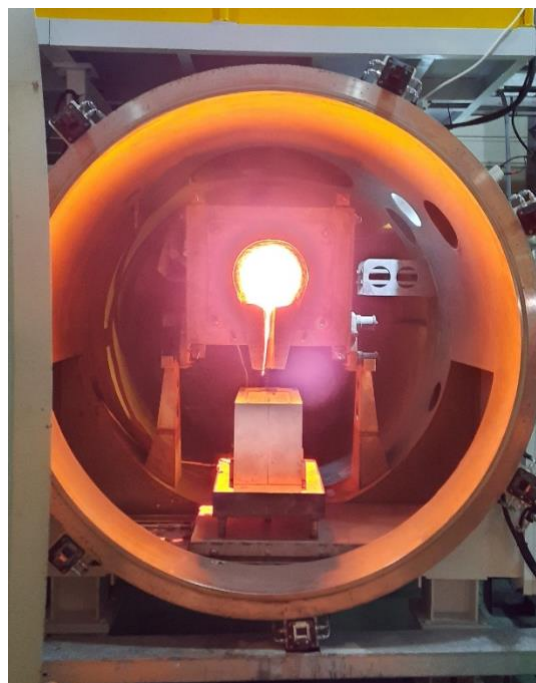


Figure 1: Tapping of titanium metal alloy

Contact Information

Contact David Woodall, Managing Director, ASM Ltd, +61 8 9227 5677

Investors Natalie Chapman, Corporate Communications Manager, +61 418 642 556

Media Marcha Van Den Heuvel, Hill+Knowlton Strategies, +61 2 9286 1226 or +61 468 960 457

The key to the successful demonstration of the commercial scalability was due to proprietary improvements to ASM's unique metallisation process, which has seen the efficiency of metal recovery more than double than the initial test work in the pilot plant. This test work confirms the ability of ASM to produce any type of titanium alloy traded in the global metal market.

This increase in efficiency was delivered while maintaining the environmental advantages of ASM's low-energy metallisation process, compared to the standard industry process. ASM will now focus on accelerating the development of a larger metals plant in Korea through its agreement with DK R&S. Members of DK R&S's management and technical team were present to witness the successful metallisation run using the improved process.

ASM Managing Director, David Woodall said "The successful commercial production run of titanium metal alloy is a significant result for the ASM team in Korea. What is even more pleasing is that this result was achieved using a newly registered patented improvement to our metallisation process, which has more than doubled the metal yield. We continue to discuss with DK R&S how we can accelerate the development of a metal processing plant in Korea.

"In addition to producing metal products from our Dubbo Project in central west NSW, ASM now has the potential to develop a significant business unit around titanium and other metals. This provides a tremendous foundation for ASM and its shareholders."

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This document has been authorised for release to the market by David Woodall, Managing Director.

About Australian Strategic Materials – www.asm-au.com

ASM is focused on producing specialty metals and oxides for advanced technologies and is the 100% owner of the [Dubbo Project](#).

Located in central-western NSW, ASM's cornerstone Dubbo Project has a long-term resource of [zirconium](#), [rare earths](#), [niobium](#) and [hafnium](#) – a globally significant source of these [critical materials](#) for a diverse range of emerging and sustainable technologies.

ASM, together with its partners, is advancing oxide separation and [metallisation technologies](#) to create a range of value-added materials from the Dubbo Project. ASM's pilot plant in South Korea has been completed with successful production of titanium, neodymium, praseodymium, dysprosium and zirconium metal. ASM's innovative metallisation process is energy efficient (titanium production uses 70% less energy) and has significant environmental advantages than the industry standard Kroll process.

ASM is progressing an optimisation study with key products for metallisation having been defined to be supplied from the Dubbo Project, and with the potential inclusion of flotation that have potential to positively impact the capital and operating costs of the project, along with increasing the revenue stream. The metals feasibility study is planned to be completed by the end of 2020 with the optimisation study to be completed by the end of Q1 2021.