

# **ASX Release**

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# SUCCESSFUL PRODUCTION OF TITANIUM METAL DELIVERED FROM COMMERCIAL PILOT PLANT

## **Highlights:**

- Titanium metal successfully produced through electro-refining process
- Commercial pilot plant produces 9.16kg Ti metal powder assaying 99.83%
- Confirmation of patented metal production method
- Forward plan for Commercial Pilot Plant Dysprosium, Praseodymium and Zirconium metal in **August**

Australian Strategic Materials Limited (ASX: ASM) (ASM) joint venture partner has produced high purity (99.83%) titanium metal powder through its new electro-refining process at the commercial pilot plant in South Korea. This was the final stage of the patented metal process that confirms 50% less energy is used than traditional methods. ASM will now focus on the production of dysprosium, praseodymium and zirconium metals in August.



Figure 1:High Purity 99.8% Titanium Metal Powder

## ASM Managing Director, David Woodall said:

"ASM's exclusive global licence to commercialise this clean metal-refining technology, replacing conventional energy-intensive and polluting metallisation processes with a more sustainable and costeffective alternative is progressing extremely well and reinforces our "mine to metal" strategy.

#### **Contact Information**

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"In addition to the valuable metal titanium, we have already proven production of a key permanent magnet metal – neodymium – with praseodymium and dysprosium production targeted for August, all essential for advanced technologies and manufacturing. This significant result provides a strong base for ASM to progress opportunities with various Korean government and business groups."

"Whilst my team and I are in Korea, we are discussing the development of a clean metal plant in Korea to feed critical metals to Korean industry, as well as one in Australia to supply Australian manufacturing. This will position ASM as the only integrated mine-to-metal producer outside of China, providing critical materials directly to Australian and international manufacturers," said Mr Woodall.

ASM's 2020 objective is to deliver an integrated metals business inclusive of the metallisation and an optimised Dubbo Project. Given the increased revenues from the production of metals and flotation at the front end of the Dubbo flowsheet, our work is focused at increasing revenues and reducing project capital and operating costs. With all major approvals and licences in place, an established extraction process flow sheet and a solid business case, ASM's Dubbo Project is ready for construction.

Our ZironTech JV is connecting ASM directly with leading South Korean companies, building customer relationships for offtake contracts under the South Korea-Australia free trade agreement. At the same time, ASM is progressing quickly on the development of its integrated metals plan with the strengthening the economics of the Dubbo Project and proving the clean metal process by the production of high purity metals.

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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 <u>Dubbo Project</u>.

Located in central-western NSW, ASM's cornerstone Dubbo Project has a long-term resource of <u>zirconium</u>, <u>rare earths</u>, <u>niobium</u> and <u>hafnium</u>— a globally significant source of these <u>critical</u> <u>materials</u> for a diverse range of emerging and sustainable technologies.

In a joint venture with South Korea's Zirconium Technology Corporation (ZironTech), ASM is advancing oxide separation and <u>metallisation technologies</u> 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 and neodymium metal. ASM is progressing an optimisation study of Dubbo Project inclusive of flotation that has potential to positively impact the capital and operating costs of the project. This optimisation and a feasibility study on the metallisation plant is planned to be completed by the end of 2020 and Q4 2020 respectively.