ASX Release

Release Date: 1 December 2020

ASM PRODUCES KEY NdFeB PERMANENT MAGNET ALLOY

Highlights:

- **ASM produced 6kg of a neodymium iron boron (NdFeB) alloy at the Korean Institute of Rare Metals (KIRAM) facility.**
- **KIRAM has certified the metallic structure and ratio of key metals (Nd: Fe: B = 32%: 67%: 1%) of the key NdFeB permanent magnet alloy.**
- **ASM continues to work on the potential for establishing a full scale metal processing facility that would include production of the NdFeB alloy.**

Australian Strategic Materials (ASX:ASM) (**ASM**) has produced 6kg of a neodymium iron boron (NdFeB) alloy at the Korean Institute of Rare Metals (KIRAM) facility in Korea. The NdFeB alloy was manufactured from the FeNd alloy produced by ASM's metallisation pilot plant (ASX 11 November 2020).

NdFeB is a key rare earth permanent magnet alloy. KIRAM has certified the metallic structure and ratio of key metals (Nd: Fe: B = 32%: 67%: 1%) of the alloy, confirming its suitability for rare earth permanent magnet production. KIRAM is a division of KITECH, the Korea Institute of Industrial Technology, which is a South Korean government research institute.

Figure 1: NdFeB metal alloy for permanent magnets

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

With the successful production of 6kg of the NdFeB alloy, ASM and KIRAM will continue the production of an additional approximately 7kg of NdFeB alloy for conversion into an initial permanent magnet samples for evaluation by Korean industry.

ASM continues to assess the potential of developing a higher-volume continuous metal production facility in 2021. The successful production of the NdFeB alloy gives ASM further confidence in its capability to produce this permanent magnet alloy at the metal facility, which would be situated in Korea (ASX 2 November 2020).

ASM Managing Director, David Woodall said: "The successful production of this NdFeB alloy is an important milestone for ASM, and paves the way for integrating production of key rare earth permanent magnet alloys into our developing metals business. Our team is working closely with KIRAM, a key research group in Korea, to gain certification of the alloy. In the coming months, we'll produce further sample permanent magnets for the Korean market review.

"ASM is now focused on assessing the potential for development of a metals processing plant in Korea. In addition to laying the foundation for a potential metals business, which would include metals from our Dubbo Project, we continue to progress offtake and strategic partner agreements."

--- ENDS ---

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.