

## ASX Release

**Release Date:** 28 July 2020

### ASM PRODUCTION OF TITANIUM METAL ALLOY CONFIRMING UP TO 50 % ENERGY SAVING

#### Highlights:

- Subsequent run of pilot plant produces another 22kg of titanium metal alloy
- This test run confirms this patented metal production method uses up to 50% less energy than current commercial production methods
- Electro refining process to produce high purity (99.9%) titanium metal progressing with results expected in August

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Australian Strategic Materials' (ASM) partner, ZironTech has successfully produced another run of titanium metal alloy at the joint venture (JV) commercial pilot plant in South Korea. This subsequent run produced approximately 22 kilograms and confirmed energy savings of up to 50 per cent compared to current commercial production methods.

ASM is successfully progressing the pilot plant testwork on low emission, high purity metal technology to produce zirconium, titanium and rare earths for permanent magnet metals. The production of metals indicates significant cost benefits to ASM's integrated business strategy and is key in the development of the Dubbo Project to supply critical materials.

The commissioning of the electrorefining section of the pilot plant is proceeding, which will produce ultra-high purity metal, including neodymium, praseodymium, other rare earth metals, zirconium and hafnium metal

Australian Strategic Materials Managing Director, David Woodall said:

"Our progress towards an independent fully integrated 'mine to metal' business of critical materials is continuing very well. ASM's focus is to be a stable, secure and alternate supplier of clean metals for the domestic and global markets with the production of these metals coming from our Dubbo Project in Central West NSW. The clean metal technology can be applied to all the products from the Dubbo Project with our focus on the key critical materials of neodymium, dysprosium, zirconium, hafnium and praseodymium.

ASM management is currently in Korea to progress discussions on the commencement of a definitive feasibility of a clean metals plant and the progress of a joint Australian / Korean strategy that could ensure supply security and stability of these critical materials to the Australian and Korean manufacturing sectors."

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ASM continues with the optimisation of the Dubbo Project through the integration of flotation into the proven flowsheet seeking improved project capital and operating costs. ASM's JV partner continues work which reinforces our metallisation strategy focussing on the products that will be sourced from the Dubbo Project.

On 16 July 2020, at an Alkane extraordinary general meeting, shareholders approved the demerger of ASM which will see ASM become a stand-alone ASX listed company with first Quotation expected on 30 July 2020.

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**This announcement is authorised for release by the Board of Alkane Resources.**

**About Australian Strategic Materials – [www.asm-au.com](http://www.asm-au.com)**

Established as the holding company for the [Dubbo Project](#), ASM is focused on producing specialty metals and oxides for advanced technologies.

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.

In a joint venture with South Korea's Zirconium Technology Corporation (ZironTech), ASM is advancing oxide separation and [metallisation technologies](#) to create a range of value-added materials from the Dubbo Project. ASM's pilot plant is in the final stage of commissioning in South Korea and production will commence in mid-2020.