

Scandium International Mining Corp. Signs Letter of Intent with Ohm & Haner Metallwerk to Test Scandium Alloys in Casting Applications

written by Raj Shah | January 23, 2018



January 23, 2018 ([Source](#)) – Scandium International Mining Corp. (**TSX: SCY**) (“**Scandium International**” or the “**Company**”) is pleased to announce that it has signed a Letter of Intent (“**LOI**”) with Ohm & Häner Metallwerk GmbH & Co.

GK (“**O&H**”), based in Olpe, Germany. O&H is a privately held manufacturer of sand cast and gravity die cast parts, using metal alloys, servicing a significant, global customer base.

The LOI calls for the Company to contribute aluminium-scandium master alloy 2% (“**MA**”), for mixing and trial-testing of proprietary alloys based on aluminium-copper by O&H. The test work will be undertaken at O&H’s production facility in Olpe, and at production scale. O&H intends to report the results of the testing program utilizing their scandium-containing alloys, as does SCY, upon completion of the testing period, which extends a minimum of 6 months.

LOI AGREEMENT HIGHLIGHTS:

- **LOI defines MA contributions and sourcing support to O&H programs,**

- O&H commits to mix scandium-containing alloys and cast parts,
- Casting results are to be shared and understood, possibly publicly disclosed, depending on intellectual property discovery,
- O&H is a recognized leader in casting technology, servicing a range of customers in industrial, mechanical, and transport industries, and
- Successful test work program forms basis for future use of scandium alloy by O&H.

DISCUSSION:

Ohm & Häner Metallwerk GmbH & Co. GK is a significant metal parts sand cast and die cast manufacturer in Europe, catering to customers requiring specialized and demanding metal cast parts. The company is privately owned, with over 650 employees, currently serving more than 400 customers. O&H produces over 3,000 individual cast parts, and currently works with over 40 different alloys, primarily aluminum and copper-based alloys, customized to individual process, unique pieces and heavy castings for special applications. The company can offer various finished product upgrade services to meet customer needs, from technical design consultation, to casting simulation, final machining and mechanical processing, to assembly, finish coating services and intermediate stocking and parts warehousing.

The cast aluminium alloys segment represents roughly 30% of the global aluminium alloy market today. Casting processes present different manufacturing challenges from the wrought/extrusion segment, and they typically rely on more customized alloy recipes and highly engineered shapes for performance. They are fundamentally parts businesses, rather than strictly sheet and shapes businesses, making them more closely tied to specific customers and specific performance requirements. Scandium brings

benefits to the casting process for some alloys, but the benefits obtained are then unique to the rigors of the specific manufacturing process employed.

Ohm & Häner is uniquely qualified to test the effects of scandium in its existing casting processes, and has already been investing in research regarding scandium impacts in cast systems, through University collaborations. This test work program is intended to demonstrate the effects of scandium additions on mechanical properties, processing efficiencies, process repeatability, and defect rates in part manufacture especially for aluminum-copper-based alloys. As an additional value, this test work will be conducted in a full production environment on real large-scale components. We believe this test work holds the potential to be an important step forward for scandium additions in the aluminum cast parts business, globally.

As SCY reported in our December 14, 2017 News Release, *SCANDIUM INTERNATIONAL – SALES AND MARKETING UPDATE*, we believe the detailed alloy test work initiated in 2017 to specifically understand scandium's effects on aluminium alloys and to be able to offer both alloy samples, and identify scandium advantages, to key potential customers is a key step in promoting customer interest in our scandium feedstock products from the Nyngan Scandium Project in Australia.

George Putnam, CEO of Scandium International Mining Corp. commented:

"We are pleased to enlist the help and talent we found in the Ohm & Häner team, and their significant prior knowledge of scandium's potential, in generating data and support for scandium additions in cast alloys. This group has a history of seeking out and successfully delivering cast-manufactured parts

to the most demanding specifications, so their orientation is perfect for a collaboration with SCY on scandium.”

Georg Dieckhues, PhD, Plant Director of Ohm & Häner commented:

“We look forward to the collaboration with SCY. We are confident that this group is a reliable and reasonable resource for master alloys containing scandium to refine aluminium-copper-based casting materials in order to improve both on castability and technical properties of the final castings.”

QUALIFIED PERSONS AND NI 43-101 TECHNICAL REPORT

Nigel J. Ricketts, BAppSc (Metallurgy), PhD (Chemical Engineering), MAusIMM CP (Metallurgy), holds the position of VP Projects and Market Development, Australia in the Company, is a qualified person for the purposes of NI 43-101, and has reviewed and approved the technical content of this press release on behalf of the Company.

ABOUT SCANDIUM INTERNATIONAL MINING CORP.

The Company is focused on developing its Nyngan Scandium Project, located in NSW, Australia, into the world’s first scandium-only producing mine. The project has received all key approvals, including a mining lease, necessary to proceed with project construction.

The Company filed a NI 43-101 technical report in May 2016, titled **“Feasibility Study – Nyngan Scandium Project”**. That feasibility study delivered an expanded scandium resource, a first reserve figure, and an estimated 33.1% IRR on the project, supported by extensive metallurgical test work and an independent, 10-year global marketing outlook for scandium demand.

This press release contains forward-looking statements about the

Company and its business. Forward looking statements are statements that are not historical facts and include, but are not limited to statements regarding any future development of the project. The forward-looking statements in this press release are subject to various risks, uncertainties and other factors that could cause the Company's actual results or achievements to differ materially from those expressed in or implied by forward looking statements. These risks, uncertainties and other factors include, without limitation risks related to uncertainty in the demand for Scandium in 3D printing applications; the possibility that results of test work by AML will not fulfill expectations and realize the perceived market utilization and potential of scandium alloys that may be developed for sale by the Company.

Forward-looking statements are based on the beliefs, opinions and expectations of the Company's management at the time they are made, and other than as required by applicable securities laws, the Company does not assume any obligation to update its forward-looking statements if those beliefs, opinions or expectations, or other circumstances, should change.