

# SCY Signs Letter of Intent with Grainger & Worrall Ltd. to Test Scandium Alloys in Casting Applications

written by Raj Shah | April 30, 2018



April 30, 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 Grainger &

Worrall Ltd. ("**GW**"), based in Shropshire, UK. GW is a privately held manufacturer of precision sand cast parts, and engineering services, using both aluminum and steel 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 by GW. The test work will be undertaken at GW's production facilities in Shropshire, first as a limited test-run, and if successful, later at small production scale. GW 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 GW programs,**
- **GW commits to mix test-scale scandium-containing alloys**

and cast parts,

- Casting results are to be shared, understood, possibly publicly disclosed, based on customer confidentiality requirements and intellectual property discovery,
- GW is a recognized leader in precision sand cast technology, servicing a range of customers in performance automotive and motorsports industries, and
- Successful test work program forms basis for future use of scandium alloy by GW.

## **DISCUSSION:**

Grainger & Worrall is a well-recognized precision air-set sand cast parts manufacturer in the UK, specializing in low to intermediate volume cast parts for commercial automotive, motorsports/racing, defense, marine, and aerospace applications. A number of the world's most renowned automotive marques rely on GW for their high-performance drivetrain and structural castings. The Company is privately held and in continuous operation for more than 70 years. GW employs over 700 staff, and operates machining/casting facilities in Shropshire, machining/casting facilities in Bridgnorth, and specialized casting facilities (COSCAST-acquired from Cosworth in 2016) in Worcester. Grainger & Worrall offers significant rapid-prototyping capability, in addition to production-level parts casting capacities, to customers requiring specialized metal cast parts. G&W has also developed an extensive library of alternative aluminum alloys, to service diverse applications and a varied customer register that are often recognized leaders in their industry segment.

Aluminum-scandium alloys should be specifically suited to high-heat applications, aligning well with GW's specialized focus on automotive engine and powertrain applications.

**George Putnam, CEO of Scandium International Mining Corp.**

**commented:**

“We are pleased to include Grainger & Worrall in our group of casting specialist companies testing scandium in their proprietary alloys. This group is a widely recognized innovative design and production casting organization, committed to exacting standards and quality, servicing world-class customers. We believe GW is an excellent candidate to test scandium in their applications.”

**Jack Strong, Research Manager at Grainger & Worrall commented:**

“In today’s dynamic, growing precision cast-parts marketplace, customers are increasingly challenging the design and intrinsic mechanical performance parameters of the components they employ. Lightweighting is the common catch-phrase, and it requires both engineering and material optimization in order to shed weight and deliver high strength. Grainger & Worrall have been quite active in materials research for some time, exploring novel and innovative approaches in improving mechanical properties of our bespoke aluminium alloys. It is therefore of great interest to the company to be able to understand the opportunities that scandium could offer. Our aim is to carry out feasibility trials to understand/optimise this opportunity, specific to our process cooling dynamics, but to also recognize practical considerations. We are very grateful to Scandium International for supporting our trials, and hope that our work together leads to potential improvements to both our process and our products.”

**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, the possibility that results of test work will not fulfill expectations, or not realize the perceived market utilization and potential of scandium sources 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.*