

# IPERIONX AND HEROUX-DEVTEK PARTNER FOR AEROSPACE TITANIUM RECYCLING

**IperionX Limited ("IperionX") (NASDAQ: IPX, ASX: IPX)** and Heroux-Devtek (TSE: HRX) have signed an agreement to underpin a 100% recycled titanium supply chain using scrap titanium metal from the aerospace industry.

Heroux-Devtek specializes in the design, development, manufacture, and repair of landing gear, actuation systems and components for the global aerospace market. It serves both the commercial and defense aerospace sectors and is the third largest landing gear company in the world.

Under this partnership, Heroux-Devtek will supply IperionX with Ti-6Al-4V alloy scrap metal generated from landing gear manufacturing. In turn, IperionX will employ its patented titanium processing technologies to convert this titanium scrap into low-carbon titanium for future applications. The processing of the Heroux-Devtek titanium scrap will be expertly managed by Aperam / ELG Utica Alloys, under their existing partnership with IperionX.

The aerospace industry depends on titanium, given its superior strength, light weight, and exceptional corrosion resistance. Titanium is integral to a myriad of aerospace applications, including airframe structural components, engine components and landing gears. The proportion of titanium used in large commercial aircraft has significantly increased over the last two decades and is now  $\sim 15\%$  of the weight of modern unladed aircraft<sup>1</sup>.

Titanium has been mass produced in the same way since the 1940's when the existing 'Kroll Process' was developed. The Kroll process is energy intensive, high cost and produces high levels of greenhouse gas emissions. In addition, the current manufacturing process for titanium products generates large volumes of titanium waste that is typically downcycled to the ferro-titanium market or shipped to landfill.

IperionX's patented titanium production technologies use less energy to produce titanium, at lower costs, with zero Scope 1 and 2 emissions, and provides a pathway to sustainable production of titanium by using 100% scrap titanium as feedstock.

Notably, aerospace industry landing gears also use other high performance titanium alloys, including Ti-5553 and Ti-10-2-3, that are valued for improved fracture toughness and strength. IperionX's technologies can upcycle these titanium alloys, eliminating the need for a re-melt process, and allow these alloys to be used in a range of new high-performance applications.

#### Dominique Dallaire, Heroux-Devtek Vice-President Central Division said:

"The partnership between Heroux-Devtek and IperionX establishes a new benchmark in the sustainability of the aerospace supply chain through the development of low carbon titanium materials for North American markets. We look forward to building upon this agreement and investigating the potential application of fully circular recycled titanium metal within Heroux-Devtek's future operations."

### Anastasios (Taso) Arima, IperionX CEO said:

"We are pleased to partner with Heroux-Devtek to develop a sustainable, circular titanium supply chain for the advanced U.S. industries. This partnership with Heroux-Devtek provides IperionX with a diversified, long term supply of titanium feedstock for the production of American titanium and will enhance the sustainability of the aerospace supply chain."

This announcement has been authorized for release by the CEO and Managing Director.

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 $<sup>^{1}\</sup> https://www.researchgate.net/publication/230251737\_Titanium\_and\_lts\_Alloys\_Metallurgy\_Heat\_Treatment\_and\_Alloy\_Characteristics$ 

## Appendix I: Key terms of the agreement

Heroux-Devtek has agreed to supply IperionX with an initial 5 metric tons of titanium scrap metal ("Initial Supply") with the intention to negotiate a long-term titanium scrap supply ("Long Term Supply") for more than 15 metric tons per year.

### **About Heroux-Devtek**

Heroux-Devtek Inc. is an international company specializing in the design, development, manufacture, and repair and overhaul of landing gear, actuation systems and components for the Aerospace market. The Corporation is the third largest landing gear company worldwide, supplying both the commercial and defense sectors of the Aerospace market with new landing gear systems and components, as well as aftermarket products and services. The Corporation also manufactures hydraulic systems, fluid filtration systems and electronic enclosures.

## **About IperionX**

IperionX aims to become a leading American titanium metal and critical materials company – using patented metal technologies to produce high performance titanium alloys, from titanium minerals or scrap titanium, at lower energy, cost and carbon emissions.

Our Titan critical minerals project is the largest JORC-compliant mineral resource of titanium, rare earth and zircon minerals sands in the U.S.A.

IperionX's titanium metal and critical minerals are essential for advanced U.S. industries including space, aerospace, defense, consumer electronics, hydrogen, electric vehicles and additive manufacturing.

#### Forward Looking Statements

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance, and achievements to differ materially from any future results, performance, or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, the Company's ability to comply with the relevant contractual terms to access the technologies, commercially scale its closed-loop titanium production processes, or protect its intellectual property rights, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements, or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.