ASX: KTG

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K-TIG ADVANCES NAVAL SHIPBUILDING APPLICATIONS

Highlights

- K-TIG, together with two of its global shipbuilding partners have been awarded a research project under the U.S. Navy's National Shipbuilding Research Program to demonstrate the suitability of K-TIG technology for the repair and sustainment of U.S. warships.
- Under the National Shipbuilding Research Program, Fincantieri Marinette Marine (FMM) and the Edison Welding Institute (EWI) will team with K-TIG to demonstrate that the K-TIG process meets the relevant U.S. Navy codes for welding in warships.
- Halliday Engineering, an Australian K-TIG customer has recently utilised K-TIG's advanced welding technology to successfully supply copper nickel pipework for a Royal Australian Navy Vessel, HMAS Choules.
- Halliday Engineering and K-TIG plan to work together to expand copper nickel welding applications to address the current and future demands of the Royal Australian Navy's sovereign capability and local content.

K-TIG Limited (ASX:KTG) ("K-TIG" or the "Company") is pleased to announce that it has been awarded a research project under the National Shipbuilding Research Program (NSRP). The NSRP is a collaborative program of the major U.S. naval shipyards, sponsored by the Naval Sea Systems Command which manages the procurement and delivery of ships to the U.S. Navy. The Program's continuing mission is to reduce costs associated with U.S. shipbuilding and ship repair and to share innovation IP across its members.

The K-TIG project titled ***Breakthrough Welding Process for Pipe and Plate*** objectives include:

- developing mechanized K-TIG methods for candidate shipbuilding and repair applications;
- demonstrating that K-TIG methods meet NAVSEA TECH PUB 248 welding procedure qualification test requirements; and
- to support the implementation of K-TIG's technology at the participating shipyard.

K-TIG is the project lead and joining in this exciting project are Fincantieri Marinette Marine (FMM) and The Edison Welding Institute (EWI). Additionally, NAVSEA and Naval Special Warfare Center, Carderock Division, will participate in the evaluation of K-TIG.

The term of the research project is 12 months and due to complete in January 2024. Under the research project K-TIG will receive approximately US$70k by way of research funding. K-TIG will supply welding services and process protocols under the research project.

While the K-TIG process is widely accepted in industry and has been proven under existing commercial welding codes, NAVSEA TECH PUB 248, Requirements for Welding and Brazing Procedure and Performance Qualification, is the critical code for Naval ship welding, and NAVSEA as the warrant holder of this code must deem the K-TIG process as conforming before it can be widely deployed in U.S. Naval shipbuilding. Once K-TIG is accepted by NAVSEA, any shipyard, contractor, or subcontractor welding to NAVSEA TECH PUB 248 can develop their own welding procedures and use K-TIG for all welds deemed appropriate to the procedure. Successful completion of the project paves the way for K-TIG's technology to be applied to a wide range of military shipbuilding applications and accelerates its adoption by the market.

Once each year, the nine panels of record of the NSRP open solicitation for white papers, receiving numerous submissions for technologies and processes that have the potential to improve U.S. Naval shipbuilding effectiveness. K-TIG submitted its project white paper to the Welding Technology Panel.

Submissions for NSRP panel projects are evaluated in a competitive process, where each of the nine shipyards participating in NSRP vote for their top three projects within each panel. The top vote-getting projects are then awarded funding in order of interest until the allocated funds are consumed. This process ensures that only projects with broad support amongst the NSRP shipyards are funded.

Adrian Smith, Managing Director, K-TIG stated: "being awarded this NSRP project is an important milestone in K-TIG's plans to penetrate the global naval shipbuilding market. The 3rd party certification of K-TIG's welding technology in meeting the relevant naval welding code NAVSEA TECH PUB 248 removes an important technical barrier to the adoption of our technology."

K-TIG Limited is also pleased to announce that Defence shipbuilding is also progressing locally with Halliday Engineering, an Australian defence SME successfully utilising K-TIG's technology to weld Copper Nickel pipework for installation on Royal Australian Navy, RAN, vessel HMAS Choules, which performs an important role in Australia's amphibious capability.

Halliday Engineering a 170-year-old company has continued their approach to innovation, with the recent purchase of a K-TIG welding system and immediately put it to good use with successfully welding Copper Nickel and supplying pipework to Atlantic and Peninsula Australia (A&P) who are the in-service Sustainment and Support contractor for RAN vessel HMAS Choules.

"A&P are a proud industry partner with Halliday and have recently engaged Halliday for a Chilled Water System upgrade, where this technology has been utilised" said Martin Mitchell from A&P.

"Our continued support of Australian business, and strengthening our sovereign capabilities remains our core focus".

Copper Nickel is a material that is used extensively in the maritime industry due to its "seawater corrosion resistance, anti-biofouling properties and ability to withstand erosion-corrosion attack" as stated by the Copper Development Association Inc. Typical applications for the material range from cooling systems, sanitary, firefighting and feeder lines along with the chilled water system as was adopted for the HMAS Choules.

Luke Halliday, Managing Director, Halliday Engineering, said: "By using the K-TIG system for the maritime application, we have been able to deliver increased productivity and reliability that typically requires significantly more labour hours to achieve the result. More importantly, the repeatability and quality of the weld is unprecedented".

"We continue to invest in advanced manufacturing and pride ourselves on our generational craftmanship and this combined, provides our innovative mindset".

This welding feat which has passed Lloyds accreditation did not go unnoticed at the recent Indo Pacific 2022 International Maritime Exposition which showcased the finished welded products, with many primes taking a keen interest regarding an Australian company using modern technique developed by another Australian company.

Adrian Smith, Managing Director, K-TIG stated: "We are continually encouraging and supportive of Australian based companies, taking on our technology and using it to advance their capabilities and opportunities. Halliday Engineering is a great example of a company that has many years of experience and still chooses to investigate and explore technologies that keep them on the forefront of innovation and industry best practices. This example further demonstrates the broader market opportunities and opens the use of K-TIG technology on the global defence industry.

K-TIG and Halliday Engineering continue to collaborate with each other to support the further development of maritime and defence applications to enhance the sovereign capability and local content in the Royal Australian Navy's ship and submarine building program.

The significance of this announcement is that it represents:

- the entering into a research project with National Shipbuilding Research Program (NSRP). The NSRP is a collaborative program of the major U.S. naval shipyards, sponsored by the Naval Sea Systems Command which manages the procurement and delivery of ships to the U.S. Navy.
- K-TIG's technology has been used to weld Copper Nickel pipework for installation on Royal Australian Navy, RAN, vessel HMAS Choules.

This announcement was authorised for issue by the Board of K-TIG Limited.

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About K-TIG Limited

K-TIG is a transformative, industry disrupting welding technology that seeks to change the economics of fabrication. K-TIG's high speed precision technology welds up to 100 times faster than traditional TIG welding, achieving full penetration in a single pass in materials up to 16mm in thickness and typically operates at twice the speed of plasma welding. K-TIG works across a wide range of applications and is particularly well suited to corrosion resistant materials such as stainless steel, nickel alloys, titanium alloys and most exotic materials. It easily handles longitudinal and circumferential welds on pipes, spooling, vessels, tanks and other materials in a single pass. Originally developed by the CSIRO, K-TIG owns all rights, title and interest in and to the proprietary and patented technology and has been awarded Australian Industrial Product of the Year and the DTC Defence Industry Award.

Forward Looking Statements

*Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of K-TIG Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking s*tatements depending on a variety of factors.