

ASX Announcement | 11 December, 2019

# K-TIG PARTNERS WITH UK NUCLEAR ADVANCED MANUFACTURING RESEARCH CENTRE

# **Highlights**

- Building on several years of collaboration, K-TIG becomes a formal member of the UK's Nuclear Advanced Manufacturing Research Centre (Nuclear AMRC).
- The Nuclear AMRC is a collaborative body comprised of Government, industrial and academic partners focused on advanced technologies used in nuclear decommissioning.
- K-TIG technology has been proven highly effective in nuclear container fabrication and adopted by nuclear fabricators in the UK and US.
- K-TIG is focussing on addressing the productivity, cost and quality challenges associated with nuclear container fabrication.
- K-TIG is changing the economics of nuclear fabrication with its disruptive welding technology and K-TIG Welding-as-a-Service (WaaS) business model.

K-TIG Limited (ASX: KTG) ("K-TIG" or the "Company"), a technology company commercialising an industry-disruptive high-speed welding technology, is delighted to announce it has become a member of the UK's Nuclear Advanced Manufacturing Research Centre ("Nuclear AMRC"), following the signing of a membership agreement.

The signing took place in Sheffield UK at Nuclear AMRC's research facility between Neil Le Quesne, K-TIG President Market Development and Sean Eley, Commercial Director NAMRC.

The Nuclear AMRC is a collaborative body comprised of Government, industrial and academic partners working within the nuclear supply chain and is one of world's leading centres of excellence and innovation specialising in the research and enhancement of the advanced technologies used in building, operating and decommissioning nuclear facilities.

The Nuclear AMRC works with companies within the nuclear sector to refine manufacturing processes, reduce risk and develop the technical capability to compete on cost, quality and delivery when tendering for nuclear decommissioning contracts.

K-TIG Limited (ACN 158 307 549) **a** ASX:KTG **a** 16 Ord Street, West Perth **a** +618 9482 0500 **a** www.k-tig.com



#### K-TIG and the Nuclear AMRC

K-TIG has a strong and longstanding relationship with the Nuclear AMRC and this membership further builds on the innovative capabilities of its technology as well as providing the opportunity to further strengthen its relationship with the Nuclear AMRC and other industry players.

As part of joining, K-TIG is providing the Nuclear AMRC with an upgrade of its K-TIG 1000 welding system to the latest configuration which will continue to be used as part of their research work.

To date, K-TIG's technology has been proven to both meet the standards of the nuclear industry and deliver exceptional effectiveness in nuclear container fabrication, and has been adopted by nuclear fabricators in the UK and US. Nuclear materials are being stored in K-TIG welded containers today, and K-TIG seeks to participate actively in the USD\$ 1 Trillion which will be spent on nuclear decommissioning through to 2050.



Sean Eley, Commercial Director Nuclear AMRC (left) and Neil Le Quesne, President Market Development K-TIG (right) at NAMRC in Sheffield, UK

### **Sean Eley, Commercial Director of Nuclear AMRC comments:**

"We're delighted to welcome K-TIG as a member of the Nuclear AMRC, which builds on several years of association and collaboration between our two organisations. We see K-TIG as a key industry partner to help us address the productivity, cost and quality challenges of nuclear waste container fabrication."

"As a key partner to the UK nuclear industry, our engineers are tackling a wide variety of challenges in decommissioning. Some of the biggest challenges are in the cost-effective manufacture of waste containers, of which we'll need tens of thousands as we decommission the UK's legacy sites. By



applying new technologies and processes to current and future designs of container, we can significantly reduce the cost of decommissioning at home and worldwide."

"K-TIG's keyhole welding technology has already proven to be extremely effective in nuclear waste container fabrication, and we look forward to working collaboratively to further expand these capabilities through a long and mutually beneficial industry partnership."

#### **David Williams, CEO of K-TIG comments:**

"As one of the world's first developers and adopters of nuclear power the UK is well ahead of the curve in terms of its decommissioning requirements relative to many other countries. It has therefore taken a global leadership position in nuclear decommissioning and has the potential to leverage its manufacturing sector to create a vast domestic and export industry which will drive economic development and create jobs for a generation."

"The Nuclear Decommissioning Agency is the key demand driver, the Nuclear AMRC is the key technology enabler and the UK's high productivity manufacturers are the key producers of this future. We can see the potential for nuclear decommissioning demand, technology and capacity to intersect in a way which positions the UK for economic success both domestically and internationally."

"It has been estimated by the International Atomic Energy Agency (IAEA) that USD\$ 1 Trillion dollars will be spent on nuclear facility decommissioning globally by 2050. Much of this will be spent using decommissioning technologies and manufacturing processes which today are in their infancy or yet to be deployed within the nuclear sector. The Nuclear NAMRC's role in facilitating this technology development and transfer is crucial. K-TIG is delighted to be working alongside such high calibre partners as the Nuclear Decommissioning Authority, Rolls Royce, Cavendish Nuclear, Westinghouse, WB Alloys and Curtiss-Wright in supporting the world-class nuclear technology development being facilitated by the Nuclear AMRC."

## Neil Le Quesne, President Market Development of K-TIG comments:

"The Nuclear AMRC's approach to developing highly advanced manufacturing techniques and processes for the benefit of the nuclear sector through industry partnerships with leading technology providers is unrivalled globally."

"The Nuclear ARMC is one of the world's leading nuclear technology innovators. It has facilitated a staggering number of breakthroughs since its inception which have translated into exceptional productivity gains, cost reductions and quality improvements associated with building, operating and decommissioning nuclear facilities."

"K-TIG intends to build on the last several years of collaboration with the Nuclear NAMRC, to become a long-term partner and to collaborate extensively in solving the productivity challenges associated with fabricating the tens of thousands of nuclear storage containers required by the UK Nuclear Decommissioning Authority over the coming years."

"The welding research and development undertaken at the Nuclear AMRC is world-leading and is focussed on developing practical, productive and cost-effective solutions to nuclear joining and cladding, and putting these into the hands of UK industry. Their focus on exceptional weld quality, negligible distortion, high corrosion resistance and stable material properties under the most demanding conditions is the identical focus as K-TIG's, and we look forward to co-developing solutions that will deliver highly tangible commercial outcomes."



"By working collaboratively with the Nuclear AMRC we believe that we can overcome some of the key manufacturing challenges associated with fabricating nuclear storage containers, assist in building the large domestic UK capacity required and enable UK fabricators to compete globally in meeting the cost, quality and delivery requirements of the many countries struggling with the sheer scale of nuclear decommissioning requirements."

By authorisation of the Board of K-TIG Limited.

--ENDS-

For more information, please contact:

Company enquiries
David Williams
K-TIG Limited
P: +61 8 7324 6800

Investor relations
Hannah Howlett
Media & Capital Partners
P: +61 4 5064 8064
hannah.howlett@mcpartners.com.au

Media enquiries
Daniel Paperny
Media & Capital Partners
P: +61 433 339 454
daniel.paperny@mcpartners.com.au

#### **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 its proprietary and patented technology, and has been awarded Australian Industrial Product of the Year and the DTC Defence Industry Award.

#### **About the Nuclear AMRC**

The Nuclear AMRC is based around a 5,000 sq m workshop, containing over £35 million worth of state-of-the-art manufacturing equipment tailored for nuclear industry applications. The building acts as a research factory for innovative and optimised processes in welding, inspection, machining and other key areas of nuclear fabrication and manufacturing technology.

Welding research and development at the Nuclear AMRC focuses on developing advanced and innovative joining and cladding techniques tailored to the needs of the nuclear industry with a focus on exceptional quality, low distortion, corrosion resistance and an ability to maintain material integrity under extreme in-service conditions.

Nuclear AMRC's welding team utilises its resources, expertise and world-class R&D capabilities to help develop new and optimised welding processes for the most demanding nuclear applications. One of Nuclear AMRC's key objectives is to work with new technology providers and innovative manufacturers to deliver higher quality, more productive and lower cost fabrication solutions for the nuclear sector and to build UK manufacturing capability with the nuclear industry.



## **About UK Nuclear Decommissioning**

The UK Nuclear Decommissioning Authority (NDA) is responsible for oversighting the decommissioning of 17 nuclear sites in the UK. It has estimated that at least GBP 121 billion will be spent on decommissioning by 2120. Within that at least GBP 4 billion is expected to be spent on the fabrication of stainless steel nuclear waste containers. It has been estimated that there are 295 nuclear facilities world wide which need to start being decommission by 2040. The International Atomic Energy Agency (IAEA) has stated that USD\$ 1 Trillion dollars will be spent on nuclear facility decommissioning globally by 2050.

# **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 statements depending on a variety of factors.