# ASX Announcement FBR Limited



# Liebherr-Mischtechnik GmbH and FBR sign Memorandum of Understanding to industrialise and commercialise Hadrian X®

#### **Highlights**

- Liebherr-Mischtechnik GmbH and FBR sign two-phase Memorandum of Understanding
- Phase 1 is focused on further development of the Hadrian X\* in readiness for mass production
- Phase 2 is focused on mass production and full global commercialisation of the Hadrian X°

Thursday, 3 March 2022 – Robotic technology company FBR Limited (ASX:FBR) ('FBR') has entered into a Memorandum of Understanding with Liebherr-Mischtechnik GmbH, a global manufacturer and supplier of high quality systems for the mixing, batching and pumping of concrete, with the intention of cooperating to industrialise and commercialise the next generation Hadrian X® automated bricklaying robot for the global construction market. Liebherr-Mischtechnik GmbH, based in Germany, is a division of the Liebherr International Group, one of the world's largest, most diverse and highly regarded equipment manufacturers. The Memorandum of Understanding is non-binding except for where otherwise provided below.

The cooperation is comprised of two phases. Phase 1 is focused on ensuring that the next generation Hadrian X® is suitable for scalable industrialisation and commercialisation. Under Phase 1, Liebherr-Mischtechnik GmbH will support FBR in the further development of the Hadrian X®, with the primary goal of ensuring that the Hadrian X® is designed for reliable, continuous operation in tough job site conditions throughout its economic life, and for manufacturing at the scale and cost necessary for serial production and full commercialisation.

In order to achieve these objectives, Liebherr-Mischtechnik GmbH will consult to FBR on, among other things, the selection and integration of major components into the Hadrian X® machine architecture, the areas of structural and mechanical design, control systems and automation, design for manufacturing, as well as norms and standards, and will provide practical feedback on the operation of heavy machinery in construction environments in applicable markets.

FBR and Liebherr-Mischtechnik GmbH will engage in regular exchange of information during Phase 1. It is expected that Phase 1 will be completed in less than two years.

Phase 2 will commence upon execution by both parties of a long-term Manufacturing and Commercialisation Agreement. This agreement will address, among other things, the appointment of Liebherr-Mischtechnik GmbH as exclusive manufacturer of Hadrian X® robots, the scope and implementation of joint commercialisation activities including supply, service and lease structure, and intellectual property licensing. Prerequisites for progressing to Phase 2 include reaching mutual agreement on the business plan, go-to-market strategy, customer service strategy and commercial viability of the Hadrian X® in key markets and achievement of key performance targets.

The following points of the MoU are binding during the term (unless otherwise approved in writing – which shall not be unreasonably withheld): Liebherr-Mischtechnik GmbH has agreed that the Liebherr Group will not work on or with any other companies to develop or commercialise automated brick or block laying technologies, and in turn, FBR has agreed not to enter into any agreement with any other party to become the exclusive OEM and distribution partner of the next generation Hadrian X<sup>®</sup>. FBR retains the right to manufacture its own Hadrian X<sup>®</sup> prototype robots.

The MOU continues for a period of two years or until the execution of a Manufacturing and Commercialisation Agreement. Except as may be otherwise provided in separate consulting agreements that the parties may enter into from time to time, each party will bear their own costs and there will be no consideration given under the MOU.



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FBR's Managing Director & Chief Executive Officer, Mike Pivac: "We are pleased to be working with Liebherr-Mischtechnik GmbH on the industrialisation and global commercialisation of the Hadrian X°. Liebherr and FBR share a vision of significantly increasing the safety, sustainability and efficiency of the construction industry. Both companies recognise that the digitalisation and automation of processes on the job site are the key enablers for realising this vision.

The cooperation with Liebherr-Mischtechnik GmbH is a significant step toward commercialisation for FBR and recognises the strong relationship we have built with the Liebherr team over the past year of technical and commercial collaboration and knowledge exchange.

This Memorandum of Understanding demonstrates a clear pathway for FBR to achieve scale with the support of an aligned partner who understands the future construction industry landscape and has the technical capability, reputation and professionalism to deliver 21<sup>st</sup> century machinery such as the Hadrian X® to the world."

Official statement from Liebherr-Mischtechnik GmbH: "Liebherr is unique in manufacturing equipment for all phases of construction; from earthmoving and deep foundation drilling, to manufacturing and transportation of concrete, as well as diverse lifting solutions. We are continuously investigating new and innovative technologies to ensure our customers' success on the job-site now and in the future."

This announcement has been authorised for release to the ASX by the FBR Board of Directors.

#### **Ends**

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### **About FBR Limited**

FBR Limited (ASX: FBR) designs, develops and builds dynamically stabilised robots to address global needs. These robots are designed to work outdoors using the company's core Dynamic Stabilisation Technology® (DST®).

The first application of DST° is the Hadrian X°, a bricklaying robot that builds structural walls faster, safer, more accurately and with less wastage than traditional manual methods. The Hadrian X° provides Wall as a Service°, FBR's unique commercial offering, to builders on demand.

To learn more please visit www.fbr.com.au