

Magnus Metal's xTechInternational success spurs \$150,000 FTAS award

2023's xTechInternational Advanced Manufacturing and Materials winner brings metal casting further into the digital era by offering the benefits of 3D printing, with the capacity and economics of traditional sand casting.



The U.S. Army xTech Program knows there is a broad innovation base beyond the U.S. market. To learn from and collaborate with these global integrators, xTech launched its international competition series in 2021. Now, the competition is a staple of the xTech Program — with the fourth iteration having launched in January 2024.

Magnus Metal was a winner of 2023's xTechInternational Advanced Manufacturing and Materials competition. Read more to see how its xTech win catalyzed a partnership with the Army.



Less than a year after its first-place win, Magnus Metal continues to forge relationships across the Army enterprise. The small business, based out of Tzora, Israel, now works with the U.S. Army Combat Capabilities Development Command Forward Elements on a continuous assessment machine tailored to the Department of Defense's current and future needs.

In August 2024, the small business received a Foreign Technology Assessment Support award sponsored by DEVCOM Forward Elements. FTAS is an Army-associated program that funds the industry to conduct technology assessments and basic research studies on novel, foreign technologies addressing the critical Army's modernization efforts.



Ardy Johnson, Magnus Metal's vice president and the general manager of U.S. operations, credits the firm's connection to DEVCOM Forward Elements with the xTech win.

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The xTechInternational competition facilitated valuable relationships which led to the DEVCOM introduction. I strongly believe our xTech win expedited the FTAS application and approval process.

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Receiving \$150,000 in total from the FTAS Program, Magnus Metal seeks a successful Technology Assessment. According to Johnson, this could include DEVCOM's purchase and installation of a Magnus machine capable of supporting the DoD's strategic manufacturing needs via digital casting. In turn, Magnus would supply a support team and regularly scheduled upgrades to the system.

By supporting the high-volume production of large, complex load-bearing metal parts, Magnus Metal's digital casting will enable the design of superior load-bearing metal parts, having multiple alloys within a single part, as well as drastically reducing the time to get those critical parts to Soldiers. This, combined with its xTechInternational participation, has helped put Magnus Metal on a trajectory to receive follow-on venture capital investments valued at \$74 million via Series B funding.



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The DoD considers Additive Manufacturing a strategic manufacturing technology for the future. Magnus' unique position to support this strategy, specifically for iron-alloy parts, enables the firm to enjoy a very receptive audience as the messaging proliferates.

Ardy Johnson

Magnus Metal, Vice President & General Manager of U.S. Operations

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xTech's international competition series enables the Army to go beyond the U.S. to find lucrative technologies that transform concepts into equipment in the hands of Soldiers. In that same vein, Magnus Metal's ongoing commercial success and partnerships within the U.S. and DoD are a testament to the importance of engaging with international innovators to solve its toughest mission challenges.

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By tapping into the international community, the Army can gain access to expertise, unique market specialties and additional sources of funding.

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Visit the xTech Program website to learn more about xTech's competition opportunities — and how they connect innovative small businesses with U.S. Army and DoD experts to revolutionize technology development.

www.xtech.army.mil

