

Johnson Controls to Acquire Alloy Enterprises in Data Centre Cooling Push

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[Johnson Controls](#) has signed an agreement to acquire Boston based Alloy Enterprises, expanding its capabilities in high performance data centre cooling and mission critical thermal management.

The US listed technology group said the deal will strengthen its position in the fast growing data centre cooling market, adding next generation direct liquid cooling technology to its portfolio. Financial terms were not disclosed.

Founded in 2020, Alloy Enterprises specialises in advanced thermal, mechanical and materials science engineering. Its proprietary direct liquid cooling platform is designed to improve thermal management efficiency by up to 35%, enabling faster and more effective heat removal. The technology can also reduce pressure drop by up to 75%, allowing fluid to flow more easily and lowering overall cooling system energy use.

Lei Schlitz, Vice President and President of Global Products and Solutions at Johnson Controls, said the acquisition would help customers respond to rising compute demands.

“This acquisition is about enabling our customers to stay ahead of fast changing compute demands by adding another core technology that enables us to optimise the overall thermal management architecture of a data centre,” she said.

“It will also strengthen our core technology capabilities that can scale across the Johnson Controls portfolio and reinforces our long term commitment to lead more broadly in advanced thermal management solutions for mission critical applications.

“With the addition of Alloy Enterprises, we are poised to set new standards in cooling efficiency and capacity and help customers accelerate time to market with the right integrated technologies. We look forward to welcoming the talented Alloy colleagues to the Johnson Controls team.”

The addition of Alloy’s technology, including its proprietary manufacturing process to enhance liquid cooling efficiency for GPUs, CPUs, memory and network interfaces, complements Johnson Controls’ existing cooling range.

This includes the recently launched YDAM magnetic bearing chiller, which delivers 3.5 MW of cooling and a 20% increase in capacity density compared with competing solutions. The company also offers the YK-HT two stage economised centrifugal chiller, almost 30% smaller than alternatives and requiring up to 60% fewer dry coolers, as well as the Silent-Aire Coolant Distribution Unit platform, with scalable liquid cooling capacities from 500 kW to more than 10 MW. Its YHAU absorption chillers are designed to recover waste heat and deliver additional cooling more than 90% more efficiently than electrical systems.

Alison Forsyth, Co Founder and CEO of Alloy Enterprises, said the agreement marks a significant step for the business.

“We’re excited to join Johnson Controls and accelerate the impact of our unique technology,” she said.

“We’ll continue to work closely to solve the industry’s most urgent challenges in data centres and other mission critical environments. We look forward to this new chapter and continuing to scale with one of the world’s most respected and experienced leaders in thermal management innovation.”

The transaction is expected to complete in the third quarter of Johnson Controls’ fiscal year, subject to regulatory approvals and customary closing conditions.