*August 2024 – for immediate release*

**Renishaw supports Mott Corporation with open architecture additive manufacturing (AM) system**

To help increase its design and production capabilities for filtration and flow control components, [Mott Corporation](https://mottcorp.com/) has acquired another metal additive manufacturing (AM) machine from global engineering technologies company, [Renishaw](https://www.renishaw.com/en/renishaw-enhancing-efficiency-in-manufacturing-and-healthcare--1030). The new [RenAM 500S Flex](https://www.renishaw.com/en/renam-500-flex--48427) machine has enabled Mott Corporation to reduce machine turnaround and setup times compared to previous AM technologies, while giving more confidence in the performance of printed parts.

Mott Corporation, based in Connecticut, USA, specialises in solving filtration and flow control engineering challenges in integrated components, point of use sub-assemblies, and integrated subsystems. It offers an extensive material selection for the most critical operating conditions, such as highly controlled bioreactor environments, semiconductor, chemical processing and refinement, and aerospace applications. It is trusted by many of the world’s largest technical and performance brands.

Historically, Mott Corporation produced components using three compaction methods: axial, isostatic, and rolling. However, there are some geometries these techniques are unable to produce. To expand its capabilities, Mott decided to investigate AM, identifying laser powder bed fusion as the best technique for its needs.

The most important consideration for Mott Corporation when choosing a machine was that it had open architecture, to enable the parameter editing that is so essential to research and development work. The organisation therefore originally approached Renishaw to purchase a RenAM 400 system.

For added control, the company then upgraded its system to the new RenAM 500S Flex machine. This machine uses the same industry-leading gas flow system, safety, and precision digital optics as the rest of Renishaw’s RenAM 500 series of additive manufacturing machines, but offers additional flexibility with the ability to swap the metal powder feedstock in a short amount of time. It is available with either single (S) or quad (Q) laser configuration, and the laser(s) can be used in either modulated or continuous wave regimes, adding an additional level of customisation. Incorporating the RenAM 500S Flex reduced machine turnaround and setup times for Mott by over 50 per cent compared to the older machine. It has also improved the standard deviation of performance metrics by approximately 30 per cent in certain cases, giving Mott more confidence in the performance of parts printed on the system.

“Renishaw’s philosophy is that process parameters should be as customisable as possible,” said John Laureto, AM Business Manager at Renishaw Inc. “Using the RenAM 500S Flex, Mott Corporation was able to optimise its processes for specific applications and can tweak the parameters as needed for novel projects.”

“Our ethos is to combine our design, filtration, and flow control expertise with cutting-edge technology to create highly engineered products,” explained Vincent Palumbo, Technical Program Manager at Mott Corporation. “That’s exactly what we’re doing here. The new machine gives us greater confidence in the reliability and performance of our parts, while speeding up development cycles, and better enabling us to bring our designs to life.”

Palumbo concluded, “The Flex has been the most popular stop on our facility tours. It’s great to see customers’ reactions to the parts we have been able to create. It has also generated useful dialogue between us and our customers to come up with development projects and think of other components we can design with them in the future.”

To read the full case study, click here

**-ENDS-**

**Notes to editors**

**About Renishaw:**

Renishaw is a world leading supplier of measuring systems and production systems. Its products give high accuracy and precision, gathering data to provide customers and end users with traceability and confidence in what they’re making. This technology also helps customers to innovate their products and processes.

It is a global business, with over 5,000 employees located in the 36 countries where it has wholly owned subsidiary operations. The majority of R&D work takes place in the UK, with the largest manufacturing sites located in the UK, Ireland and India.

For the year ended June 2022 Renishaw recorded sales of £671.1 million of which 95% was due to exports. The company’s largest markets are China, USA, Japan and Germany.

Renishaw is guided by its purpose: Transforming Tomorrow Together. This means working with customers to make the products, create the materials, and develop the therapies that are going to be needed for the future.

Further information at [www.renishaw.com](http://www.renishaw.com/)