Rocket Lab installs Giant Carbon Composite Rocket-Building Machine

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Rocket Lab USA, Inc. (Nasdaq: RKLB), a global leader in launch services and space systems, today announced the commencement of installation for its largest-ever automated fiber placement (AFP) machine at its Neutron rocket production facility in Middle River, Maryland. This state-of-the-art machinery will revolutionize the production of carbon composite structures for the company's upcoming Neutron rocket.

The custom-built, 99-ton AFP machine, manufactured by Electroimpact in Washington, is set to automate the creation of the massive carbon composite components that form the backbone of the Neutron launch vehicle. These structures include the interstage, fairing, first stage, and second stage tanks.

Boasting a 98-foot reach and capable of laying down carbon fiber at an impressive 328 feet per minute, the machine incorporates a cutting-edge real-time inspection system. This ensures the highest quality standards are met by identifying and addressing any defects in the carbon composite material before proceeding with the next layer.

By automating this critical production process, Rocket Lab anticipates saving over 150,000 manufacturing hours, significantly accelerating production timelines for the Neutron rocket.

Rocket Lab founder and CEO, Sir Peter Beck, says: "As we build the world's largest carbon composite rocket, it makes sense that we require a world-first carbon composite fiber placement machine. We're combining our proprietary flight-proven carbon composite technology, additive manufacturing, and autonomous robotics to design and build large-scale aerospace components at a pace that will support not only Neutron's launch cadence, but support Electron and carbon composites structures for our spacecraft customers too.

"We worked closely with our excellent partners at Electroimpact to create this robot and we're thrilled with

the results. It’s an innovative machine producing a next-generation rocket from one of the birthplaces of the aerospace industry in Baltimore, and we can’t wait to see its first carbon composite printed panels come off the production line soon.”

Beyond Neutron, the AFP machine will also be utilized to produce carbon composite structures for Rocket Lab’s Electron launch vehicle, as well as components for spacecraft and other aerospace applications.

This investment in cutting-edge technology reinforces Rocket Lab’s commitment to innovation and leadership in the space industry.