

Spirit AeroSystems to Deliver First 3D-Printed Commercial Aircraft Part



WICHITA, Kan., Dec. 21, 2018

Spirit AeroSystems [NYSE: SPR] announced the receipt of its first additive-manufactured, titanium, structural component for the Boeing 787. The part, a back-up fitting for an access door latch, has been machined and finished at Spirit's Wichita site, and installed in a 787 forward fuselage. The forward fuselage will ship to Boeing's final assembly facility in January.

The milestone follows more than nine years of collaboration on technology innovations and applications between Spirit and Norsk Titanium (NTi).

"Integrating additive manufacturing capability into our production system to build end-use titanium parts expands Spirit's fabrication capabilities and puts us at the forefront of advanced manufacturing," said Kevin Matthies, Spirit AeroSystems senior vice president of Global Fabrication. "With our Norsk collaboration, Spirit is bringing the power and benefits of additive manufacturing in support of our customers."

An advanced form of 3D-printing, NTi's proprietary plasma arc Rapid Plasma Deposition™ (RPD™) technology is used to build up the parts to a near-net shape, minimizing waste, using less energy and significantly reducing product costs. NTi

creates near-net shaped components; Spirit then performs final machining, finishing, inspection and installation.

Spirit AeroSystems is one of the largest manufacturers of fabricated parts for the aerospace industry. The company delivers a fully-integrated forward fuselage structure on the 787 program, with all flight controls tested and installed. The composite forward fuselage section is built using automated fiber placement machines, winding composite tape into a one-piece fuselage section.

Spirit employs about 16,000 people worldwide designing and building complex aerostructures for the world's most recognizable airplanes. Spirit builds the forward fuselage section of every Boeing commercial airplane in production today, as well as wing and propulsion components.