

Rolls-Royce Crosspointe Manufacturing Facility

Rolls-Royce Crosspointe, located on more than 1,000 acres in Prince George County, Virginia, approximately 30 miles south of Richmond, is a center of excellence for the manufacture of jet engine components, used in some of the company's large civil aerospace engines – the Trent 1000, Trent 900 and Trent XWB – for the Boeing 787, Airbus A380 and A350XWB.

The site contains two manufacturing facilities that share adjoining offices, meeting rooms and a cafeteria. The first, built in 2011, is the Rotatives factory. The second is the Advanced Airfoil Manufacturing Facility (AAMF), commonly referred to as the turbines factory, which began production in 2014; plans are underway to expand its capacity by 2017.

Fan discs, blisks and other circular components are made in the Rotatives factory. AAMF produces turbine blades, which are components for the hottest part of a gas turbine system.

Crosspointe is the first Rolls-Royce manufacturing facility built from the ground up in the US. It is also the largest Rolls-Royce site by area in North America. The campus is designed for suppliers, other manufacturers and research institutions, such as the Commonwealth Center for Advanced Manufacturing, to locate near Rolls-Royce.

Siemens Software at Crosspointe

Rolls-Royce Crosspointe utilizes Siemens software and hardware to help digitalize the manufacturing process from top floor to shop floor. Machining tools, such as CNC Machines, are automated by Siemens controllers and software are used by Rolls-Royce and connected through Simatic IT, Siemens' manufacturing execution system, Delivering PI (Process Intelligence) and MI (Manufacturing Intelligence).

Through this, data is transferred via Siemens' Product Lifecycle Management Software backbone, Teamcenter. Siemens PLM software is used from the design phase through production to help digitalize the manufacturing process. Every layer of the Rolls-Royce manufacturing process is connected via Siemens software.