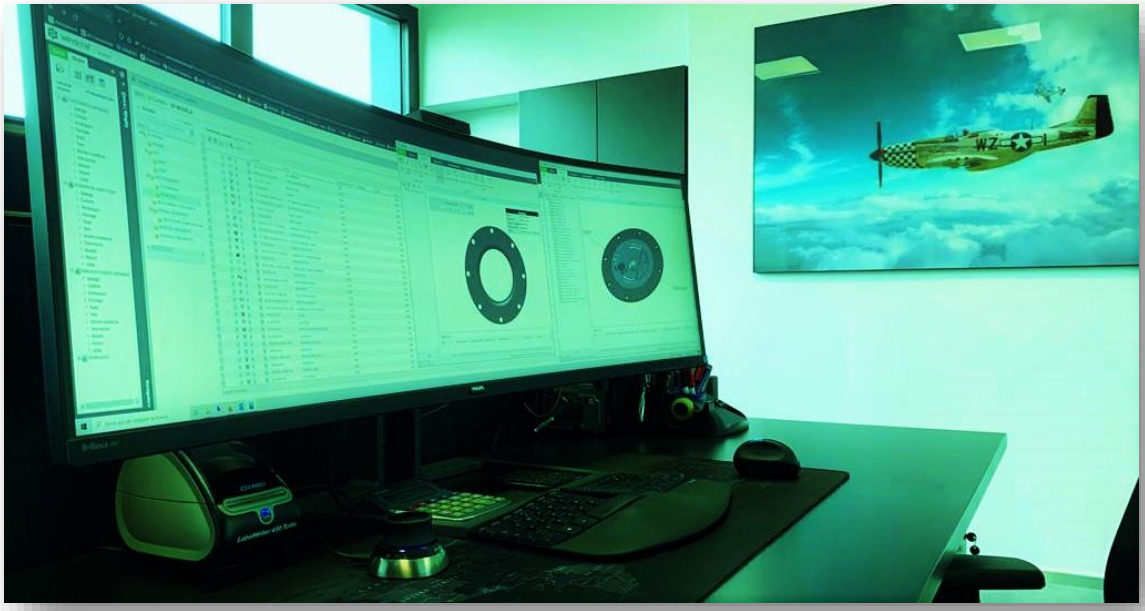
Angera – November 14, 2022

PRESS RELEASE
ASPR-142022-01 Aerosystems Case Study - Creo and Windchill

Aerosystems Develops Innovative Components for the Aerospace Industry



Rapid growth and product development for aerospace customers required Aerosystems to have a safe, controlled process for managing certified product development, undergoing customer audits, and demonstrating thorough configuration and project management.

Aerosystems has manufactured high performance Precision Aerospace Components for more than 70 years. In 2019, after a spin-off with the old company, the management founded a new company and new brand called Aerosystems, continuing to produce aerospace components with consolidated know-how and historical background.

From the new modern facility located at Angera, in the Lombardy region of northern Italy, Aerosystems supply precision aerospace components to some of the world's leading aircraft and helicopters manufacturers. Today Aerosystems components can be found in the **Ventilation Systems, Fans and Blowers, Sensors, Electrical Motors and Generators, Actuators, Fuel caps and Filters, and Windscreen Wiper Systems** flying on many of the world's most advanced fixed and rotary wings aircraft.

Aerosystems products are developed and qualified according to customer specifications and in close collaboration with airframer companies.
Aerosystems customers appreciate the scope and Quality of our **Certifications EN9100 and ISO9001** certified manufacturing capabilities and the quality of components. Aerosystems is also a certified **EASA Part 21 PO Product Organization** and an **EASA Part 145 MO Maintenance Organization**.

Business Challenges

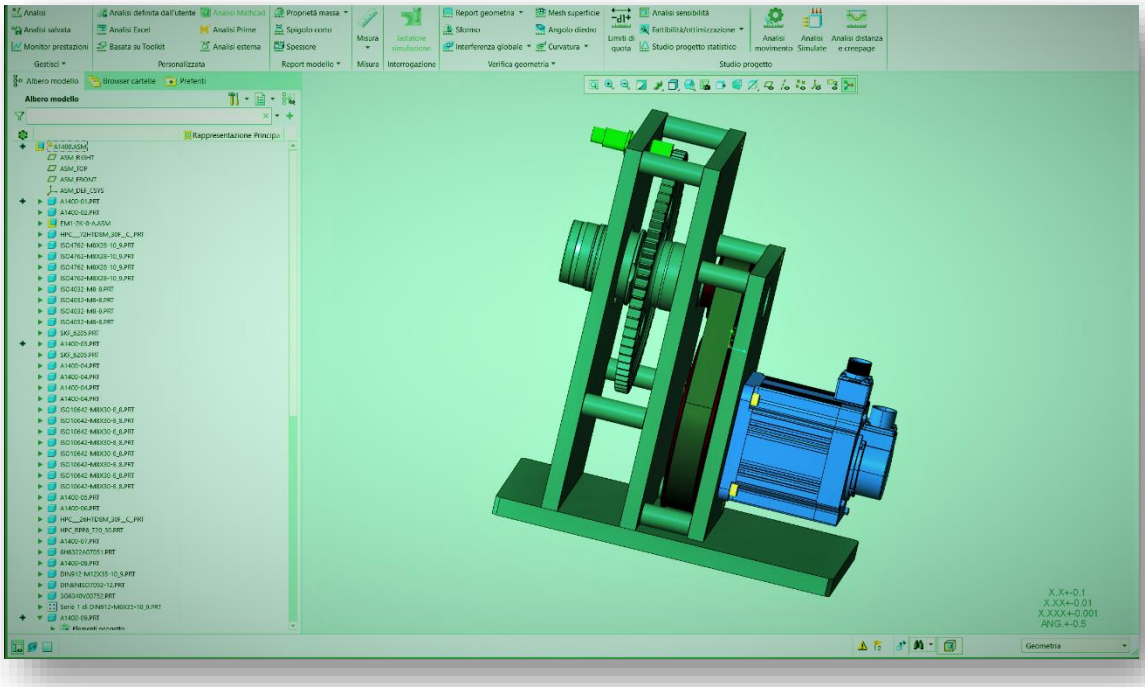
The presence of Aerosystems in the Aerospace Market, and its affordability were strengthened by the present new young management, through the introduction of new technologies, energies and expertise; an innovative engineering and manufacturing company, which designs and produces high performance and high reliable build-to-print electromechanical devices, mainly for the aerospace market.

Innovation, together with Aerosystems know-how and expertise, has favoured the born of the new company and the establishing of relationships with highly specialized aerospace companies.

Aerosystems is a company which loves accepting new challenges and always focused on turning customer problems into solutions, moving from concept to prototype to production.

The realization of new requests and the use of new technologies are fundamental elements of our company and favor the continuous updating and the ability of Aerosystems to be a reliable partner.

PTC Creo and Windchill



Aerosystems quickly realized that as the company expanded its scope to manufacturing, people, processes and systems would be needed. "What could help us tackle this digital revolution?" It was immediately clear that we needed **a unique system, a PLM and CAD design platform that could be shared and related to Aerosystems' MRP workflow** over the product lifecycle and the quality management system".

After detailed examination of current needs and capabilities, Aerosystems made the business case for implementing PLM capabilities within PTC Windchill. This implementation would help the company to better manage the change processes and workflows that drive product development, leading to faster time to market and fewer errors in their Manufacturing Resource Planning (MRP) system. It would also help bridge the gap between engineering and other product teams, allowing for a smoother and secure transfer of information. With this decision, design, engineering, manufacturing, and service teams built a plan for implementing new capabilities, defining a multi-task rollout according to business needs.

Aerosystems implemented PTC Windchill as a complete PLM software for data management and traceability, a single source for engineering, manufacturing, suppliers and customers. Now, everything in the company is changed, managed and linked to project plans, as the engineering bill of materials (eBOM).
The first phase was to implement the WT Parts, a software feature that allowed Aerosystems to automate engineering bill of materials (eBOMs) into the MRP system. The WT Parts are the center of all information relating to a component, for this reason Aerosystems has connected all the CAD files, Drawings, Technical Modifications, BOM and Technical Specifications to the WT Part, creating a single source during the whole process.

The strategy was to combine **the capabilities of PTC Creo and Windchill PLM** in relation to MRP. Aerosystems recognized that by inserting real-time PLM data and digital solutions into its operations, the company would accelerate time to market, offering greater flexibility and faster response times. And by connecting suppliers, people, machines and customers in unified systems and intelligent applications, there was an opportunity to drive more reliable and transparent processes.

Knowing PTC technology for a long time and having used ProE in the past, the Aerosystems team determined that Creo Parametric could help evolve the design and assembly process for large and complex components. Creo is PTC's 3D modelling software that allows the user to create, analyse, visualize and share downstream designs using computer-aided design (CAD) modelling capabilities.
Creo, PTC's Computer Aided Design (CAD) platform and one of the most widely used platforms in the world, was used by Aerosystems to design all new products that replaced the need for other CAD software. This has enabled the company to achieve results that would otherwise have been impossible with other CAD systems.

"The great advantage that Creo offers designers is in its impressive features and the simplicity of the harmonious environment. Creo's composition of a set of modules makes it functionally complete and seamlessly integrated into a single environment. This is very important because, at unlike other CAD systems available on the market, all information about the design is immediately available, which helps to avoid converting form formats or importing files that take a long time with an inevitable loss of information".

"The design and engineering at Aerosystems have improved with PTC and its products," say the Aerosystems managers, "PTC technology has grown with us to support our needs, helping us to provide qualified and certified, safe precision aerospace components to our customers".