

SMITHS AEROSPACE

CASE STUDY

Software Maintenance Costs Reduced To One Sixth . . .

Smiths Aerospace is the world leader for the supply of innovative products and systems to civil and military aircraft builders and operators. They supply components and integrated systems combining the group's digital, electronic power and mechanical engineering expertise.

Smiths Aerospace, Mechanical Systems – Cheltenham, design and manufacture landing gear and hydraulic systems and they are market leaders, at the front of their technology. They were one of the first companies to purchase and operate a 3D CAD/CAM business system back in 1992.

Gavin Phillips, Engineering Director for Smiths Aerospace Landing Gear & Hydraulic Systems at Cheltenham, says, "Initially, we used 3D Unigraphics, an excellent system; however, we were not fully utilising the benefits of this top-end system, but were paying thousands of pounds each year in maintenance"

Active study groups in Cheltenham, along with Smiths Aerospace Wolverhampton site, set up an exercise to understand their exact requirements and identify 3D software solutions that were more economical to maintain. Wolverhampton initiated the use of SolidWorks, and due to its success and the desire to standardise across the group, Cheltenham was quickly persuaded to adopt the system.

Working with several consultancy companies, Smiths Aerospace was able to tailor the system to their needs and successfully migrate existing data to SolidWorks.

Smiths Aerospace has now used SolidWorks successfully since 1999. Even with a commitment of over one hundred seats, maintenance costs annually are now about one sixth of what they were with their previous software supplier. Quite simply, the savings are considerable - totalling hundreds of thousands of pounds.

3D modelling enables Smiths' design engineers to quickly visualise concepts, investigate stress analysis and generate tool paths. Smiths' teams also rely heavily on the SolidWorks drawing package, as drawings still represent a critical part of their design and manufacturing process, being a Civil Aviation Authority approval requirement. SolidWorks also converts easily to Catia Version 5, which is used widely within the aerospace industry and means that communication with key customers is not compromised.

