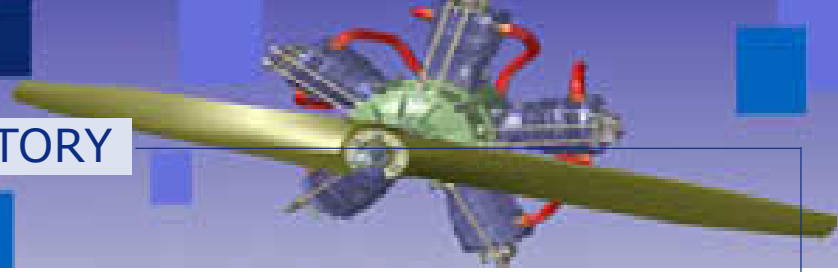




CASE HISTORY



ACHELON BRINGS VISUALIZATION AND ANIMATION TO THE SHOP FLOOR.

Based in Italy, Achelon is located in Canale, a little city just outside Turin, near the heart of Italy's automotive design center and a short distance from Fiat Group, Maserati, Ferrari, and other leading manufacturers. Northern Italy is also known for its industrial design and production and is a hub for such key Achelon clients as Lear Corporation, Bosch, Collins & Aikman, Comau, Polytec and many others.

Achelon Helps to Streamline the Production and Design Process

With over 500 customers, Achelon is a key provider of specialized design solutions to streamline the production and design process for all of these companies. Achelon provides technology that simplifies and extends the software used by design engineers so that everyone in the production and manufacturing process can quickly review, access, and implement designs at manufacturing and production sites.

Among Achelon's principal products are converters that refine the interoperability between various CAD systems and specialized tools to visualize and access CAD models without having design expertise. Achelon offers tailored configurations of Actify SpinFire Professional, server-based solutions, and tailored applications built using Actify SDK. One of Achelon's unique offerings, for example, is an SDK-based application called SpinMotion that animates the explosion and integration of assemblies. SpinMotion is extremely useful in explaining how to assemble a set of parts for use in testing, quality

control, user manuals, and other similar applications.

One of the key problems for engineering and production companies in Italy is trying to extend access to CAD models deeper across the production floor, where costs are critical and CAD expertise is rare. Achelon helps bring key portions of the design information to the production and assembly centers at the end of the cycle by making them easy to use and access.

On the factory floors in Italy and other production environments, many companies have not invested in expensive workstations. Meanwhile, the engineers and designers who work on the early stage of products use very high-end equipment. Bridging the gap between design and production poses a significant challenge for companies, especially when they want to limit their capital spending for hardware.

Bridging the Gap Between Design and Production

Fabrizio Pasquero, and Roberto Brontolo, Achelon's co-founders, were initially involved directly in engineering design and CAD visualization. During their assessments of product lifecycle management for clients, they found too much separation between the design and the production process that was causing bottlenecks for many companies. They also found that even within CAD-centric organizations there was a lot of wasted effort spent trying to convert and access drawing and models created in different systems.

"We found one company used five miles of plotted paper during a single production cycle. Since they introduced SpinFire they have reduced that to two miles of plotted paper and hope to reduce it further still."

"In Italy, there are two kinds of companies, design specialists who hand off their work to the manufacturers, and integrated companies with both design and production," Fabrizio Pasquero explains.

"The design businesses and the departments that focus mostly on design will have highly technical people throughout. Often these are separate small firms especially in automotive and aerospace where dozens of subcontractors are involved.

They are very comfortable working with a variety of CAD files, and because the design work is very individual, very solo, it is possible to use the best available tool even if it requires using many different platforms," Pasquero said.

"When the drawings must be shared with suppliers or imported into other software, CAD systems always have some interchange available, but this is not without problems. While the users are very capable of converting the drawings, for them the issue is how to improve access. Using IGES or similar interchange formats will often lose

"Extending availability of technical drawings to the shop floor is another story completely. There, many people, other than designers must have access, including sales and marketing, machinists, production, project managers and others. The shop floor will not have the latest PCs or workstations on it, and enabling access to CAD files there requires a small, fast application that is not too taxing on the equipment or the user," Pasquero said.

Taking Visualization to the Shop Floor with SpinMotion

For the factory, it was important to create a small lightweight SDK version of SpinFire. Achelon also created other easy-to-use applications such as SpinMotion to quickly help visualize the design and show how an assembly fits together. In its SDK version Achelon stripped out SpinFire Pro's .3D conversion capability and left in only visualization and measuring to create a much lighter product that is one fourth the size of SpinFire Pro, performs 60-70% faster, and can be used on any PC, according to Pasquero.

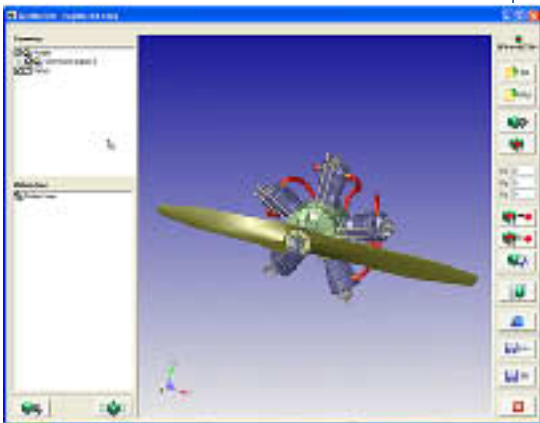
Achelon has just introduced SpinMotion and the SDK version of SpinFire, but it is already entering the production cycle at several companies, including a major aerospace client using it in three different factories. According to

visualization process that is already important for most design departments today.

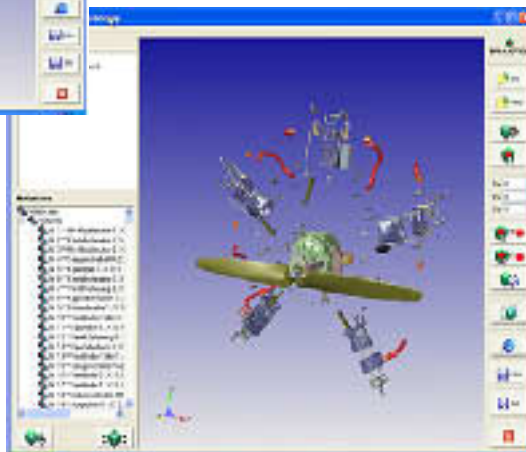
Streamlining access to CAD on the factory floor is an issue that is just beginning to gain traction in Italy. In studying Italy's factories and shop floors, Achelon found that today they mostly use cumbersome and difficult means such as paper and plotter to review designs. In many instances, there are only two or three employees capable of using the technical information. Achelon also found that the sheer volume of plotted paper was a significant expense in itself.

"We found one company used five miles of plotted paper during a single production cycle. Since they introduced SpinFire they have reduced that to two miles of plotted paper and hope to reduce it further still. On that basis alone, a factory can fully outfit its floor with SpinFire and recover its costs in less than two years," Pasquero said.

"In Italy new hardware is quite expensive, and factories are reluctant to take on additional overhead costs. For the cost of three new PCs, however, a company can provide visualization for 30 SpinFire clients. The first step is to start the culture of visualization rather than working from paper. But once these tools have been implemented, we find they are used every single day and they are having a dramatic impact on improving the production processes."



data and is difficult to keep synchronized. Another significant issue in importing files between systems is the loss of time in doing so. For these companies, we found it is critical to have extended tools, such as SpinFire Pro to make it easier to view and import files between systems, including the ability to quickly convert them to .3D files," Pasquero added.



Pasquero, it is a great opportunity to enable the factory to use the design



Actify, Inc.
60 Spear Street, Suite 500
San Francisco, CA 94105
Phone: 415.227.3800
Fax: 415.227.3802
sales@actify.com
www.actify.com