SIEMENS
Ingenuity for life

Automotive and transportation

Ocap

Ocap steers its way to managing a single, unified source of product data

Products

Teamcenter, Solid Edge, Femap

Business challenges

Operate in a multi-CAD environment per customer requirements

Manage all data using a single PLM system

Integrate several sites in different countries into a single database

Keys to success

Configuring a PLM solution that requires no customization

Using CAD for fast and intuitive 3D design

Using FEA to validate new design concepts from the earliest stages

Results

Established multi-CAD environment with a flexible PLM infrastructure

Developed a single unified database, accessible throughout the organization

Enabled fast analysis calculation to check stress values on parts

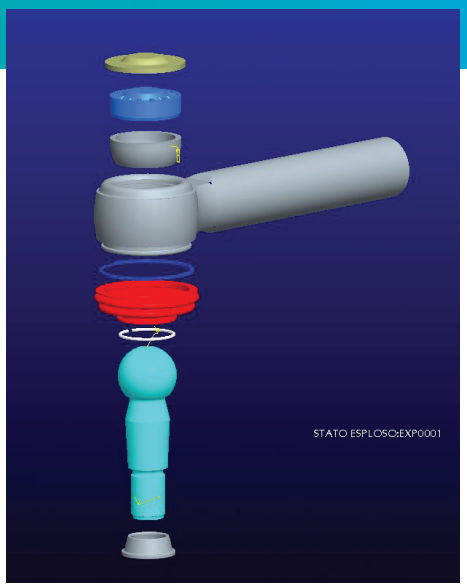
Using Teamcenter enables automotive supplier to deploy multi-CAD, multi-site product development system

Managing CAD data from multiple systems using a single source

Ocap SpA is managing and sharing design information from multiple computer-aided design (CAD) systems using Teamcenter® software from product lifecycle management (PLM) specialist Siemens PLM Software.

Ocap-branded ball joints and other steering and suspension system parts are sold in 147 countries for use in cars, tractors, trucks, vans and other vehicles as well as for hook-ups between ships and offshore oil platforms. The Ocap holding company controls Ocap Italia Srl in Italy, focusing on original equipment manufacturer (OEM) customers; manufacturing sites in New Delhi, India and Shanghai, China; and Ocap International Srl, a robot-assisted warehouse in Oglianico, Italy.

To help engineers manage both OEM and aftermarket product development, Ocap's engineering department initially adopted I-deas™ software from what is now Siemens PLM Software, because the integrated finite element modeling (FEM) capabilities provided by I-deas enabled them to perform advanced simulation on OEM parts for



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Engineering Manager
Ocap SpA

tractors. The company later migrated to Solid Edge® software, the most complete hybrid 2D/3D CAD system that uses synchronous technology for accelerated design, faster change, and improved imported re-use – as well as employed Femap™ software, an advanced simulation solution. Both solutions are from Siemens PLM Software.

Two CAD systems plus two PDM systems = rework and duplication

Meanwhile, a contract with agricultural equipment manufacturer John Deere required Ocap to develop CAD models using PTC's Pro/ENGINEER® software. A similar requirement came from automaker Lamborghini. "We used Pro/ENGINEER for OEM product development, while continuing to use I-deas for aftermarket product design and simulation," says Jean-Jacques Tomas, Ocap engineering manager. "So, we ended up with two CAD systems and two big product families developed in parallel using different systems. We had to manage product data that was partly stored using the I-deas Team Data Manager database and partly using PTC's Pro/INTRALINK PDM system, which led to rework and duplication issues.

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"The situation was further complicated by a new site in India with its own engineering department developing designs for OEMs and the aftermarket using Pro/ENGINEER without a product data management system. So, we started to look for a system that could enable us to have a single, unified database for data generated using Solid Edge and Pro/ENGINEER throughout the world as well as provide the scalability to add a factory in China that was set to come online with its own data search and visualization needs. This unified database had to be accessible to all enterprise departments, including people working outside the engineering domain."

The choice of Teamcenter

Ocap conducted a software analysis and selection process that led to the adoption of Teamcenter, the world's most widely used PLM software with a large installed base in the automotive industry. "We considered different solutions and finally chose Teamcenter because it offered more reliable multi-CAD and multi-site capabilities," Tomas says. "Our network connection with India was unstable, so we needed a system that could adapt to that condition. Teamcenter provides options for integrating remote sites as well as seamless interaction with CAD systems from different vendors. These multi-CAD

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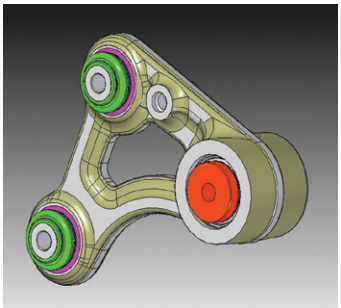

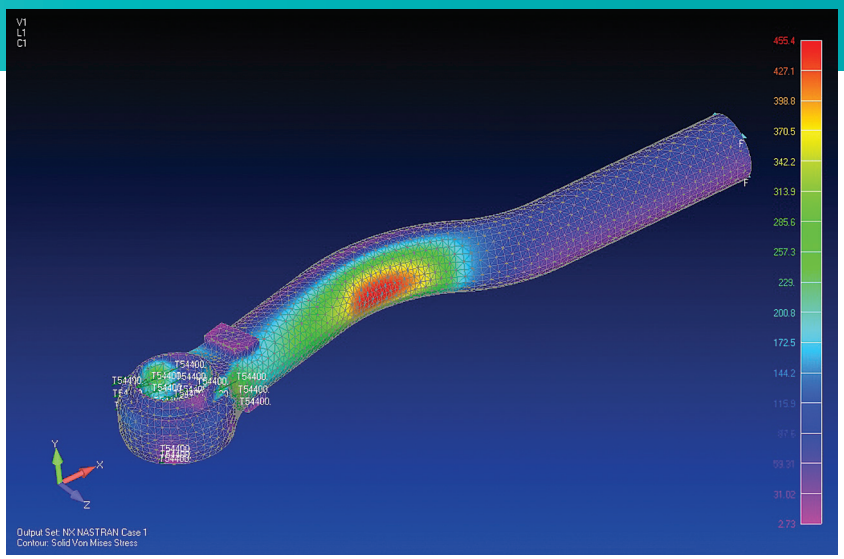

capabilities represent a unified archive. You can open each unique item in both modeling systems, without any translation."

Ocap engineers have easily adapted to using Teamcenter, as well as Solid Edge and Femap. "Solid Edge is more intuitive and faster than other CAD packages, so we use it extensively for aftermarket and OEM products," Tomas says. "Using Femap, we

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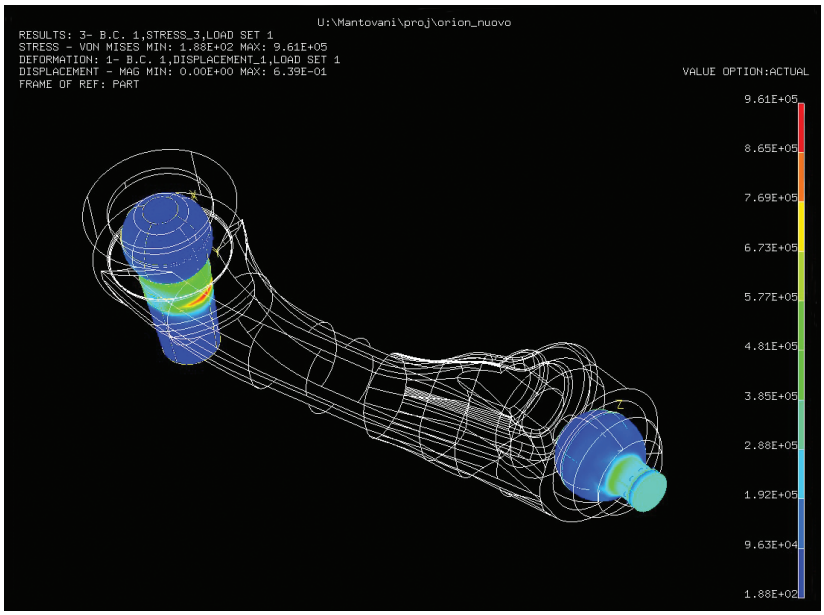

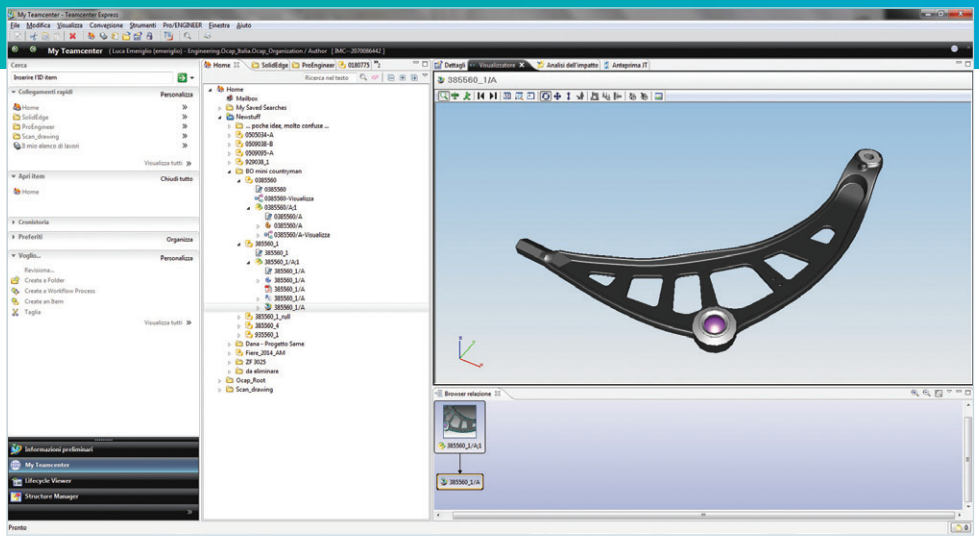

Solutions/Services

Teamcenter
www.siemens.com/teamcenter

Solid Edge
www.siemens.com/solidedge

Femap
www.siemens.com/plm/femap

Customer's primary business

The Ocap group designs, manufactures and markets mechanical parts for vehicle steering and suspension systems.
www.ocap.it

Customer location

Valperga, Turin
Italy

Partner

Tech-Value
www.tech-value.com

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Ocap has uploaded all design data to Teamcenter and has also launched the migration of documents, images, pictures and other materials from different departments. "The migration process required no customization. We simply used the standard features of Teamcenter," Tomas says.

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