

Teamcenter® Success Stories

Putting the Power of PDM and PLM to Work

Teamcenter® from Siemens Digital Industries Software



Teamcenter® is the world's most widely used Product Lifecycle Management (PLM) system – one that organizes, standardizes, streamlines, and modifies your plans and data across your entire organization. The unmatched breadth and depth of the Teamcenter portfolio means that you can solve more of the tough challenges required to develop highly successful products. From the intuitive Teamcenter user interface, people across the organization can take part in the product development process more easily than ever before.

Get started with Teamcenter by taking control of product data and processes, including 3D designs, electronics, embedded software, documentation, and your bill of materials (BOM). Reach greater returns on your PLM system by leveraging your product information across more functions and departments, including manufacturing, quality, cost engineering, compliance, service, and your supply chain. Teamcenter has the flexibility to adapt to business changes and manage all of the challenges of product development.

Teamcenter Rapid Start

Rapid Start is a competitively-priced solution for Teamcenter that applies preconfigured best practices to everyday engineering tasks and processes for small-to-mid-sized manufacturing companies, departmental workgroups, suppliers to OEMs, and other product manufacturers. It delivers all of the robust Product Data Management (PDM)

capabilities of Teamcenter, plus the flexibility to grow into additional PLM capabilities as needed. With Rapid Start, Teamcenter can be deployed and ready to use in nearly 70% less time that it takes for a custom installation of the separate software components.

Rapid Start is the fastest way to get up and running with PDM, then grow to PLM:

- Deployment option for Teamcenter, the most widely used PLM solution in the world
- Documented and proven two- to three-week deployment versus competitive solutions
- More affordable option than traditional services consulting, especially for SMBs
- Simple upgrade path from version of version
- Customers can add on Active Workspace
- Can expand to standard Teamcenter while keeping Rapid Start's unique features



CAD-Neutral Visualization & Collaboration

Teamcenter is a true CAD-neutral platform that manages the associativity between native CAD files and the CAD-neutral JT format. This allows the creation of multi-CAD parts and assemblies, and extends design data across the organization and externally to see product as it changes. Files can be imported into another CAD authoring tool, and notations, mockup and analysis can be done inside of the system. In addition, most of the CAD information can be used for clearance analysis and assembly-checking.

Teamcenter enables design teams to create, manage and reuse native design data from multiple CAD systems, including NX™ software and Solid Edge® software from Siemens, as well as Autocad, Catia, Creo, Inventor and Solidworks, all in a single secure environment. Managing CAD as just another file type is not the same as interrogating native CAD files. To find out if a PDM system is truly CAD-neutral like Teamcenter, ask these 10 questions:

- What is the list of CAD systems supported?
- Are NX and Solid Edge supported?
- Can the CAD designs interact in the PDM system?
- Can PDM users save files as both a CAD-neutral file format (i.e. .jt) AND a CAD system file type (i.e. .prt, .asm)?
- Can designers open EITHER a CAD-neutral file or a native file type to see files designed in other CAD systems?
- Can they create assemblies from CAD files created by different systems?
- Can they manage design BOMs across CAD systems, maintaining associativity from the design file to the CAD system of origin?
- Can they exchange CAD-neutral files with suppliers and customers?
- Can non-CAD users make notations, mockup and analysis of designs?
- Is there integrated visualization or digital mockup?

Teamcenter features:

- Adaptable PLM Foundation
- Bill of Materials Management
- Change Management & Workflow
- Document Management & Publishing
- Electrical Design Management
- Environmental Compliance & Product Sustainability
- Manufacturing Process & Data Management
- Materials Data & Lifecycle Management
- Mechanical Design Management
- Model Based Systems Engineering (MBSE)
- Product Configuration
- Product Cost Management
- Product Requirements Engineering
- Program Planning & Project Execution
- Search & Analytics
- Simulation Management
- Software Design & Asset Management
- Sourcing & Supplier Integration
- Streamlined Service Operations
- Visualization, Digital Mockup & Virtual Reality

Teamcenter® Success Stories

Des-Case and Teamcenter

Des-Case Corporation was founded in 1983 to provide the lubricant industry with innovative solutions to extend oil and equipment life. The original breather was the brainchild of company founder Jim Waller, who responded to the request of an engineer at a major oil company looking for a way to improve the performance and longevity of his products. As a filtration engineer by trade, Jim's entrepreneurial spirit took hold with this opportunity and the breather was created and put into production.



For more than 30 years, the company has enjoyed an excellent reputation for its products and service quality, dependability and business integrity. Des-Case holds patents in the airflow design of breathers with technology that has yet to be surpassed in the marketplace. Customers include manufacturers in many different industries, including General Mills, GE Appliances, Eli Lilly and Company, Nissan Motor Company, Xcel Energy, and U.S. Steel.

According to Keith Mawdsley, Director of Engineering for Des-Case, Teamcenter's ability to manage the company's bill of materials (BOM) and integrate with the ERP system for ordering materials were key to its success. The company maintains thousands of product configurations and needed a robust PDM system to replace the Excel-based solution used previously. First implemented in 2013, Teamcenter integrates with the company's SOLIDWORKS 3D CAD design software via the Integration Module, as well as with Oracle's JD Edwards ERP software to order materials.

A precise and accurate engineering bill of materials (EBOM) is essential for new products, since this is the document that ensures that the correct materials and parts are available in the correct quantities when the product is being manufactured. "Teamcenter has the Super EBOM which quickly created accurate bills of materials," according to Aaron Payne, Teamcenter BOM Administrator for Des-Case. "It is also good for drawing PDFs for the supply chain," he added.



Fisher Dynamics and Teamcenter

Fisher Dynamics is the automotive industry's premier supplier of safety-critical seat structures and mechanisms. The company is descended from the original Fisher Body Company founded in 1908 by the Fisher brothers, who developed interchangeable wooden body parts that did not have to hand-fitted. This success in mass production resulted in the capacity to produce 370,000 bodies per year by 1916, with customers including Ford, Krit, Chalmers, Cadillac, Oldsmobile, and Studebaker.

Today, the company manufactures a full line of power and manual seating systems. Seat structures include front seats, fold-flat rear seats, multi-function rear seats (including split rear seats) and advanced lightweight seating. Seating mechanisms include recliners, track systems, latches, and power height adjusters.

The company has one of the more complex PDM and Change Management installations, with CAD integrations for NX CAD, Catia, Creo, and SOLIDWORKS. But it was the needs of the automakers that they work with – General Motors, Ford Motor Company, and Fiat Chrysler Automobiles – that led them to switch from PTC's Windchill to Teamcenter in 2014. Those OEMs all use Teamcenter, leading Fisher Dynamics to make the decision to install four separate instances of the software for the three companies and for their own internal use.

"Overall, from the perspective of managing users and managing everything on the administrative side, it is a whole lot easier than Windchill," says Brian Smith, Applications Developer for the company. But it is the support from Geometric Solutions that makes the software a success for Fisher Dynamics. "We have had a great relationship. If I can't answer a question, I go to Geometric Solutions. If they can't answer it, they have a direct line to Siemens."

The local presence and onsite availability were reasons that Fisher Dynamics chose to work with Geometric Solutions as their



VAR, and have continued to work with them since switching to the Teamcenter solution. In one instance where the software required upgrading, he says "I had a guy from Geometric here for 30 hours straight to do the live update over the weekend."

Cupertino Electric and Teamcenter

Cupertino Electric, Inc. is an electrical engineering and construction company that uncovers challenges and delivers cutting-edge solutions for commercial, renewable, utility, modular and data center customers experiencing intense change. The company is the largest utility contractor in California, with more than 3,000 employees and decades of experience building large-scale solar projects and cutting-edge data centers for Internet companies.



For Nathan Larson, Engineering Manager for Cupertino Electric, selecting Siemens software and Geometric Solutions was an easy choice, because he had worked with them previously at another company in the material handling industry. "I didn't look at anyone else other than Geometric Solutions," he says.

While the company did not have a PDM solution, they mostly were using Autodesk products previously for CAD. "Other companies in our industry have some of the same geometry challenges and same document control challenges, and they swear by the Siemens products. It seemed like a low-risk solution." As a result, the company decided to migrate to NX CAD and Teamcenter at the same time.

For Cupertino, the primary PDM challenges are engineering document control and

process control, and the company had no other formal systems that can handle those functions. "We needed an easily deployable PDM system. Rapid Start helped us get up and running quickly. Probably about a month to be fully implemented."

Other services from Geometric Solutions have helped them continue to get the most out of their Siemens software investment. They have relied on Geometric for Siemens training, as well as using their support services for configuration and setup. "I have been using them daily for the past month to get Teamcenter upgraded from one version to another," he says, because of a new product about to be launched that was built using the system. "Geometric Solutions is easy to work with. I have been working with the same person there since I started working with them seven years ago."

Why Choose Geometric Solutions?

An Experienced Partner

Geometric Solutions has a unique advantage over other VARs that sell Siemens Digital Industries Software. We don't just sell it – we use it every day. Geometric Solutions is part of the Waltonen family of companies, which includes Waltonen Engineering, a Tier 1 supplier to General Motors since 1957, and Independence Tooling Solutions. This real-world experience allows us to give our clients an unparalleled perspective on which modules to buy, and how to configure the software for maximum efficiency and effectiveness.

Geometric Solutions has been in existence since 2002, becoming the first Tecnomatix VAR partner of Siemens. In fact, the Waltonen family of companies is the largest non-OEM user of Tecnomatix in the country, with more than 25 seats that we own and use on a daily basis. We also have 164 seats on NX, 12 seats on Process Simulate, 9 seats on Line Designer, 3 implementations of Teamcenter, and deep experience using other Siemens software solutions including VSA, DPV, Plant Simulation, and Mechatronics Concept Designer (MCD).

The Entire Siemens Software Suite

While we sell and support the entire suite of Siemens Digital Industries Software, we have particularly deep expertise in the following solutions:



Tecnomatix – Tecnomatix digital manufacturing solutions help to ensure that you can build your products as well as you design them. Whether you are designing a new plant from the ground up or introducing a new product into an existing facility, Tecnomatix solutions can help streamline implementation, reduce startup costs, and get you from art to part as quickly as possible.

Teamcenter – Teamcenter is the world's most widely used Product Lifecycle Management (PLM) system, helping companies to manage product data and streamline operations across the enterprise. With Rapid Start, we can quickly deliver all of the robust Product Data Management (PDM) capabilities of Teamcenter, plus provide you with the flexibility to grow into additional PLM capabilities as needed.

NX – NX is the integrated product design, engineering and manufacturing solution that helps you speed product development, improve quality, and reduce costs. It is a powerful suite of integrated tools including NX CAD, NX CAM, NX CMM, and NX Line Designer.

Solid Edge – Solid Edge is a portfolio of affordable, easy-to-use software tools that address all aspects of the product development process. Solid Edge combines the speed and simplicity of direct modeling with the flexibility and control of parametric design – made possible by synchronous technology.

Flexible Services

Geometric Solutions provides a full range of consulting and implementation services to our clients to get the most out of the Siemens Digital Industries Software investment. In addition, we offer a unique Service to Ownership™ partnership program to successfully transition clients from a service model to full ownership of the software.

Our consulting work consists of discover calls, software demonstrations, and onsite visits to perform gap analyses. The gap analysis involves working with customers to understand their current environment versus where they want to be, to meet their goals and stay competitive. In addition, we have resources available to install and implement any of the Siemens software tools.

The Service to Ownership™ program is perfect for smaller companies that question if they have enough work to justify a software investment, or if they have the internal ability to use the tools. We complete a small project for the client with the software, while they look “over our shoulder” and build the ROI

case for acquiring the software. With the second project, we work shoulder-to-shoulder with the client by providing online support while they learn to use the tool in their own processes. By the third project, the client has taken ownership of the software, and our role is to “look over their shoulder” to assist as needed and guarantee that they have a successful conclusion. By this point you are up and running and your team is full engaged, ready to assume full control with total confidence.

Unparalleled Support

Geometric Solutions is your first line of support for Siemens software, with a direct line to Siemens for any issues requiring additional support. Tech support is provided by experienced Application Engineers Monday through Friday, 8am – 5pm EST, and is available through our toll-free support line 844-GEO-SUPT (844.436.7878) or via email at techsupport@geoplms.com.

In addition, we provide complimentary “Lunch & Learn” sessions to keep your skills up-to-date on Siemens Digital Industries Software.

Custom Training

We offer a variety of standard and customized training options, including instructor-led classroom training, web-based training, and onsite training. Classes are held at our office locations in Chicago, Indianapolis, and Warren (Detroit), or at the customer’s location.

Our web-based training options include instructor-led GoToMeeting sessions or can be self-paced using the Siemens Learning Advantage portal. The benefits of web-based training is that it can be broken up into increments and spread out over time, allowing users to maintain their typical daily workload. Classes are scheduled at customer request and are usually reserved for individuals that are part of the same company.

Our most flexible training option involves bringing the classroom onsite to your facility. With this option, we can build a customized curriculum tailored to your needs, as well as offering industry-specific tutorials. Depending upon proximity and duration, this option can contain additional expenses for travel and lodging.