Your focus is delivering GREAT PRODUCTS THAT CREATE VALUE for your clients. You know INNOVATION IS KEY to differentiation and better market position. But how do you innovate and still DELIVER ON TIME AND ON BUDGET?

SOLIDWORKS SOLUTIONS CREATE A COMPLETE, CONCURRENT PRODUCT DEVELOPMENT EXPERIENCE! Integrate your process for more efficiency and innovation

**Typical Serial Product Development**
- The typical product development process is serial. You create a concept, design it, test it, document it, and manufacture it. If anything fails or changes, you may have to cycle back in your workflow, creating rework, costing you extra time and money.

**Integrated, Concurrent Product Development**
- With an integrated approach, you can run product development steps in a concurrent development workflow:
  - Verify performance during design and reduce risk while you explore alternatives
  - Manage and communicate design data efficiently with easy access to the most recent data
  - Close the gap between design and operations so Manufacturing builds it right the first time
- Grow your business with SOLIDWORKS solutions

Dassault Systèmes SOLIDWORKS® offers tools that help designers, engineers, and manufacturers create and deliver great products. Our integrated solutions help to eliminate barriers to speed and innovation so your team can work more efficiently. SOLIDWORKS solutions can help streamline your workflow, reduce development time and cost, and get you the information you need at exactly the right time to make better design decisions.

**SOLIDWORKS Solutions**
- **SOLIDWORKS 3D CAD** speeds design innovation with intuitive 3D modeling
- **SOLIDWORKS Composer™** leverages SOLIDWORKS 3D for efficient communications
- **SOLIDWORKS Simulation** validates design, manages risk, and reduces prototyping
- **SOLIDWORKS Electrical** integrates schematic design and 3D CAD in real-time
- **SOLIDWORKS Enterprise PDM** manages your data to design review and increased collaboration

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**Explore how SOLIDWORKS SOLUTIONS can help you create value.**
CP MANUFACTURING, INC.

CP Manufacturing, Inc., an innovator in waste management and recycling equipment, needed to shorten delivery lead times to meet demand for custom-engineered plants and equipment. With SOLIDWORKS solutions, CP Manufacturing cut design time by 50 percent, reduced design errors by 90 percent, and realized a paperless document management system.

“Setting up the models correctly in SOLIDWORKS enabled us to develop designs more quickly and easily, cutting design time from a couple of weeks to a couple of days,” said CAD Development Manager Adrián Velázquez. “With SOLIDWORKS, our designs are also more accurate, which helps us accelerate release to manufacturing and avoid problems during assembly.”

Using SOLIDWORKS Enterprise PDM to facilitate design reuse enabled CP Manufacturing to set up workflows and other functions that use design data to improve efficiency and shorten release times.

The company also leverages design data to create high-quality visuals and animations for sales presentations and user manuals. Velázquez adds, “When we turn over a project, we provide a SOLIDWORKS Composer animation to show the plant manager and facility employees what happens at every single stage of the separation process, improving our communication with our customers.”

HOW DO I BRING NEW IDEAS TO MARKET?

Your customers need to understand how your concept will deliver value. With SOLIDWORKS 3D CAD, you can efficiently develop new concepts, leveraging similar designs that you quickly find in your database with SOLIDWORKS Enterprise PDM and evaluating design alternatives with SOLIDWORKS Simulation. You can save time and cost, using SOLIDWORKS Enterprise PDM to track progress, manage design versions, and automatically route data to your whole team. Your Marketing and Sales teams can work in parallel with Design. They can access the latest designs in SOLIDWORKS Enterprise PDM and use SOLIDWORKS Composer to create custom graphics directly from 3D CAD, without any handholding from Engineering. You can create brochures, presentations, even 3D animations—updating changes automatically and showing model variations on demand. You can turn over a project with a SOLIDWORKS Composer animation to show the plant manager and facility employees what happens at every single stage of the separation process, improving our communication with our customers.”

RESPOND QUICKLY and show the value you deliver.
Martin Aircraft created the world’s first practical jetpack, which can sell at a price comparable to a high-end motorcycle or car. The company turned to SOLIDWORKS to finalize development because it provided needed design, simulation, and visualization capabilities, and was a familiar tool to newly hired engineers and key partners.

With curved housings and fan blades made from composite materials, surfacing and mold development became increasingly important. “SOLIDWORKS gave us the surfacing, simulation, and flow simulation tools that we needed to quickly optimize key components,” said Founder Glenn Martin.

Since the company moved to SOLIDWORKS, Martin Aircraft cut mold development from three weeks to one day, eliminated the need for prototype molds, and accelerated development of the jetpack, which was named one of TIME Magazine’s 50 Best Inventions of 2010. “There’s no doubt that SOLIDWORKS has helped us to accelerate development and save time and money,” Martin added. “It’s fantastic to have access to a modern tool like SOLIDWORKS, which gives us as a small company the same skills and capabilities as a multinational corporation.”

CUSTOMER STORY

MARTIN AIRCRAFT

New ideas keep you competitive, but you have to meet your schedule. SOLIDWORKS 3D CAD simplifies complex modeling—from machined parts to the most complex shapes, even advanced surfacing and large assemblies. It can help you design faster and work more efficiently. With SOLIDWORKS Enterprise PDM, you can quickly search your files for similar designs and use standard parts and assemblies to save time. Then explore and test design options with SOLIDWORKS Simulation, that’s integrated in the design environment. You can be confident in trying new ideas, because you can reduce the risk with the integrated solution.

Creating virtual prototypes while you design helps to ensure you don’t over engineer (adding time and cost) or under engineer (causing redesign or potential failure of a big issue). You can identify design issues before instead of finding problems at the end, where redesign would have a negative impact on cost and delivery. You can even compare design variations to make better decisions and create products with improved performance.

How do I innovate and manage risk?

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validate performance while you design

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Customer Story

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SMC Corporation of America produces a wide range of pneumatic components, such as cylinders, actuators, regulators, and valves. SMC chose SOLIDWORKS to support its growing custom-designed product and online initiatives. SOLIDWORKS solutions helped SMC streamline development processes, increase the number of custom-configured products, reduce scrap and rework, and support ecommerce with configurable model downloads.

“The customers want to see the product working in their assembly,” Jason Hyde, UTC Engineering Group, pointed out. “The online store leverages SOLIDWORKS design configuration capabilities to provide fully configurable models for download.”

SOLIDWORKS Enterprise PDM helps facilitate design reuse, establish more effective revision controls, and automate workflows at SMC.

“SOLIDWORKS really opens you up to a whole different world of being able to visualize designs, simulate design performance, and share that data with customers in a language that they can understand,” said Hyde. “Time is money, so anything we can do to speed up the process will improve customer satisfaction. Whether it’s special requests or configurable models for download, SOLIDWORKS is helping us achieve that ultimate goal.”

New products are often variations of existing products, with current designs tweaked or reconfigured to meet customer needs. In other times, major sections of one or several designs get reused in other designs.

You can have better control of your design data with tools that easily find and repurpose files, parts, and drawings, share design information; automate workflows, and help anyone manufacturing always has the right version. SOLIDWORKS Enterprise PDM helps you create a framework to quickly locate and reuse or repurpose existing design data. Designers and engineers can also quickly find design data and documentation to create new designs with SOLIDWORKS 3D CAD.

You can evaluate designs under real-world conditions with SOLIDWORKS Simulation to clearly show how your product works in a simulated environment. Your integrated view of product development, along with process data from inside and outside your organization, can help you manage your investments and reduce risk.

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SOLIDWORKS Composer helps designers quickly create designs, taking advantage of SOLIDWORKS 3D CAD. You can leverage existing design data and create new designs quickly.

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Or leverage design data and develop 3D visuals and animations with SOLIDWORKS Composer to clearly show how your product works in a visualized assembly. Your integrated view of product development, along with process data from inside and outside your organization, can help you manage your investments and reduce risk.

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Wamore, Inc. manufactures airdrop systems for securely delivering payloads up to 42,000 pounds from cargo aircraft to the ground via ram-air parachute, supporting the U.S. military in active combat theaters.

To help improve assembly documentation, Wamore added SOLIDWORKS Composer to its SOLIDWORKS portfolio. This helped Wamore to shorten assembly instruction development time by 85 percent, automatically update assembly instructions, and substantially reduce questions on the shop floor.

Wamore also uses SOLIDWORKS Enterprise PDM to handle design changes and assembly updates. “The thing that I love about SOLIDWORKS Composer is that I can incorporate a lot of input and easily update the documentation,” CAD Specialist Mark Gerhart pointed out. “I go into SOLIDWORKS Enterprise PDM, update the files and links, and I’m done.”

Using SOLIDWORKS Composer software to make product animations, videos, and technical documentation accessible via the web and hand-held digital devices, Wamore is also helping its customers access up-to-date information even from remote battlefield locations and improve their operational readiness.

CUSTOMER STORY

USE 3D ILLUSTRATIONS to show how your product works

Your assembly and operating instructions shape the user’s experience. SOLIDWORKS Composer helps you directly leverage your SOLIDWORKS 3D CAD data to create dynamic 3D illustrations and videos that bring your designs to life.

With an intuitive user interface, SOLIDWORKS Composer works directly with popular software packages and helps reduce production time and cost for assembly instructions, operator guides, and manuals. Instead of written descriptions, you can show your instructions, helping you save money on technical writing and translation.

With SOLIDWORKS Composer, you can start documentation earlier. Developers can access design files through SOLIDWORKS Enterprise PDM and work in parallel with design and manufacturing. When design changes occur, graphics can update automatically, so your documentation can be ready at product delivery.

HOW DO I SHOW MY CUSTOMERS HOW TO USE MY PRODUCT?

SOLIDWORKS 3D CAD
SOLIDWORKS Composer
SOLIDWORKS Enterprise PDM
ELECTRONIC CONTROLS COMPANY
The world’s largest manufacturer of emergency warning products, ECCO (Electronic Controls Company) focuses on innovation as an essential strategy for maintaining leadership. SOLIDWORKS design, simulation, and data management helped ECCO reduce its design cycles by 40 percent and realize an additional 25 to 30 percent reduction in the time to complete design reviews and approvals.
When developing a new base for its four-foot and six-foot emergency light bars, ECCO used SOLIDWORKS Simulation structural analysis to increase the stiffness of the base, then used SOLIDWORKS Plastics to simulate mold filling, which led to additional design changes to help improve manufacturability.
"These time savings mean more to our business than you might think," Engineering Team Leader Todd Mansfield explained. "In addition to the internal benefits, these efficiency improvements allow us to better respond to our customers. We also have greater confidence in the manufacturability of a design. It helps us avoid going back and forth with the moldmaker after the fact, which saves time and reduces costs."
CUSTOMER STORY
EXPAND PRODUCTS AND SERVICES
to create new value
You want to deliver an excellent product experience so your customers stay with you. SOLIDWORKS solutions give you the tools to help you refine your products and your processes to create even more value.
With SOLIDWORKS 3D CAD, you can easily expand your product line to new price points and new markets, and use SOLIDWORKS Enterprise PDM to efficiently guide your product teams through your development processes, giving team members access to the right files at the right time.
SOLIDWORKS Simulation solutions give you data to open new lines of business that deliver value, and can help you create predictive models for service contracts (including preventive maintenance) that you can supply while managing your cost and risk. You can continue to stay involved with your customers and uncover new opportunities.
SOLIDWORKS 3D CAD
SOLIDWORKS Simulation
SOLIDWORKS Enterprise PDM
SOLIDWORKS Simulation
SOLIDWORKS 3D CAD
SOLIDWORKS solutions are geared to how you work every day. Quick to deploy, easy to use, simple to administer, they help increase your efficiency while helping you lower costs.

SOLIDWORKS solutions are scalable. You choose what you need now and easily add capability without disrupting your workflow for a fast return on investment. Higher efficiency can help you capitalize on new opportunities and reposition and focus your team on strategic and market-leading projects. You can have more time for innovation and be able to evaluate risks for better decisions.

Add more value with a Worldwide Community

More and more companies, consultants, suppliers, and manufacturers conduct their business with SOLIDWORKS software for rapid product development and innovative design.

The SOLIDWORKS Community spans the globe with a network of users motivated to support, collaborate, and share insights.

SOLIDWORKS Value-Added Resellers work to help make you successful, providing a global presence with local on-site support. SOLIDWORKS software helps you get productive fast and there’s support from official technical channels and your colleagues.

Visit our website at www.solidworks.com to find your local SOLIDWORKS reseller or to request a quote.
Our 3DEXPERIENCE platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences. Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes’ collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 170,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.