

SOLIDWORKS TECHNICAL COMMUNICATIONS

ADDING A NEW DIMENSION TO YOUR TECHNICAL COMMUNICATION DELIVERABLES



**POWERFUL, YET
SIMPLE SOLUTIONS
TO HELP YOU
GROW YOUR
BUSINESS**

You put significant time and money into developing your products, and you want to be sure that they are assembled quickly and accurately, and used so that the experience they deliver is a good one for your customers.

SOLIDWORKS® Technical Communications solutions enable you to create product communications early in the design process, simplify its creation, keep it updated, and deliver it on time. This easy-to-use software leverages your existing design data so you can work faster and more efficiently. SOLIDWORKS Technical Communications software can help you clearly present even the most complex data for technical and user documentation, sales materials and presentations, and inspection and manufacturing.

“The purpose of our CAD system is to help us design, analyze, and manufacture parts in a way that reduces costs and time-to-market. SOLIDWORKS enables us to accomplish everything that Cane Creek needs to achieve in terms of automating product development.”

– Joshua Coaplen, R&D Director, Cane Creek Cycling Components

POWERFUL TECHNICAL COMMUNICATIONS SOLUTIONS TO HANDLE DOWNSTREAM DELIVERABLES WITH EASE

SOLIDWORKS Technical Communications applications empower both engineers and non-engineers to create assembly instructions, product manuals, inspection documentation, manufacturing information, and other downstream deliverables quickly and easily.

In all aspects of your product development process, from start to finish, you can reuse and leverage your existing 3D CAD data to innovate, create better products, and bring your ideas to market faster.

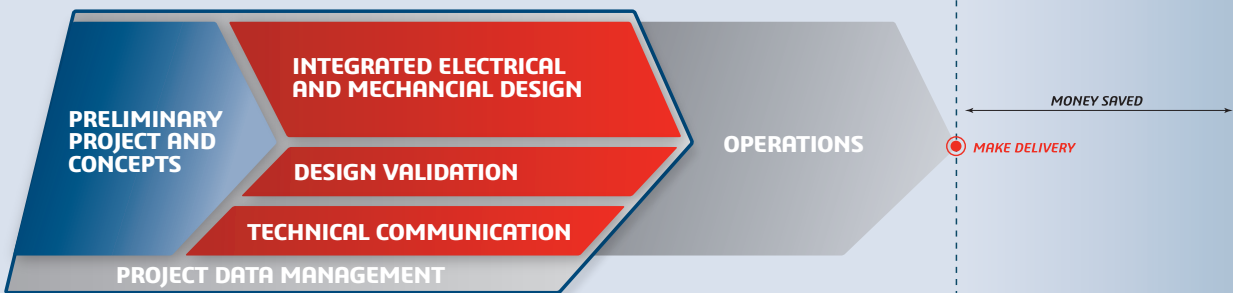
The SOLIDWORKS Technical Communications suite of solutions:

- Easier repurposing of 2D and 3D content to make detailed technical illustrations, animations, product communication, and interactive 3D experiences
- Model-based 3D (PMI) for integrated drawingless manufacturing
- First Article Inspection (FAI) and in-process inspection documentation creation for quality control

TYPICAL SERIAL PROCESS



SOLIDWORKS PROCESS

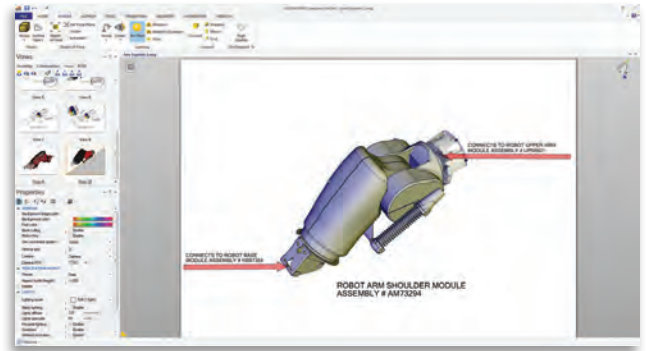


SOLIDWORKS COMPOSER

Intuitive communication solutions that help you bring it all together

SOLIDWORKS Composer™ gives you the tools to design and produce technical communication deliverables in parallel with product development—so your documentation keeps up with your design changes and is ready with your product. The intuitive SOLIDWORKS Composer interface enables you to create highly detailed 2D and 3D graphics with precise control to highlight areas of interest and focus on specific components. You can easily output 3D interactive animations to create a realistic 3D environment for interactive training or compelling marketing presentations.

Because SOLIDWORKS Composer is associative, you can automatically update any changes you make to the CAD models in your technical communication deliverables. For the first time, you can get products to market faster with the assurance that your documentation is both high-quality and accurate. SOLIDWORKS Composer pictures and animations are particularly valuable in simplifying assembly instructions and work orders. You can directly show 3D views of how your product is assembled or repaired, reducing errors on the shop floor, eliminating language barriers, and significantly minimizing localization costs.



Enhance product communication and marketing collateral

You no longer need to compromise your communications by relying on rough drawings to show your concepts or waiting until your design is finished to start creating product communication deliverables. With SOLIDWORKS Composer, you can quickly and easily create:

- Detailed views
- Exploded views
- High-resolution images
- Technical illustrations
- Interactive animations
- Interactive Bills of Materials (BOMs) and parts lists

Compete for more business

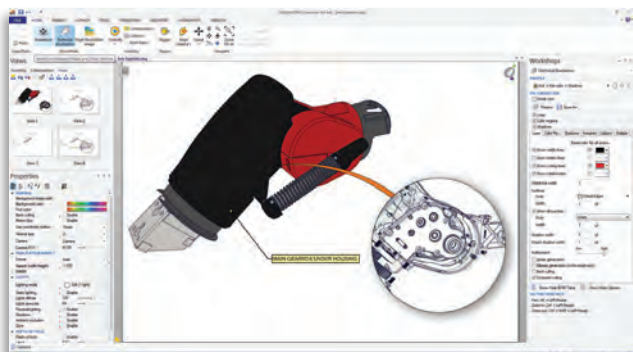
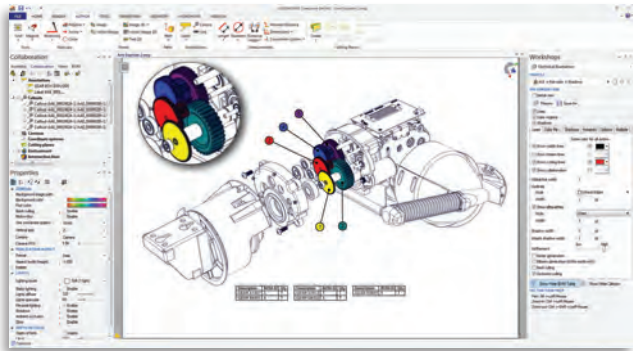
Today, visual images are more important than ever. The right product graphics can mean the difference between making or missing the mark in key sales situations. With SOLIDWORKS Composer, you can:

- Create more lifelike visual imagery and eliminate the need for physical prototypes in creating product marketing materials
- Demonstrate products more effectively with interactive storyboards
- Highlight key differentiators with detailed views, glow effects, and transparent components
- Impress prospects with a quick turnaround of updated designs
- Create interactive animations to effectively communicate the most complex product details

Get products to market faster

SOLIDWORKS Composer helps you reduce documentation errors and ensure that deliverables get to market faster:

- Start documentation earlier in the design process and update it faster when design changes occur
- Create interactive 3D content that can be viewed by anyone with the free SOLIDWORKS Composer Player
- Add interactive graphics to training materials
- Create high-resolution, shaded renderings with a 3D appearance for presentations and brochures
- Quickly publish complex product details online with web templates

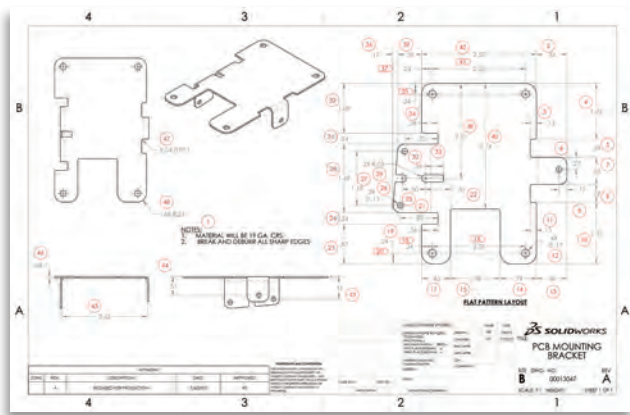
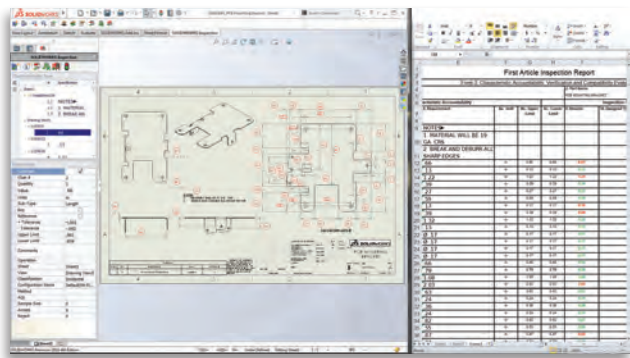


SOLIDWORKS INSPECTION

Simplify document creation to help streamline part inspection and improve quality

Your commitment to quality should not negatively impact your business, but you can potentially spend hours every day manually creating documentation for quality inspection. SOLIDWORKS Inspection helps simplify the process of creating inspection documents and performing in-process or receiving inspection.

Intuitive and easy-to-use SOLIDWORKS Inspection helps streamline creation of documents with balloon callouts and specifications by leveraging existing 2D legacy data regardless of file type—SOLIDWORKS files, PDFs, or TIFFs— and automating what is now a manual and tedious process. Measured inspection values can be entered directly, either manually or automatically, using a digital measuring instrument (such as a USB caliper). SOLIDWORKS Inspection helps designers and quality inspectors virtually eliminate errors, improve time-to-market, and ensure parts are within specifications for improved quality, and optimized fit and function.



Optical Character Recognition (OCR)

In many companies, engineering drawings arrive in PDF or TIFF formats. In these cases, SOLIDWORKS Inspection uses OCR to read and identify the nominal dimension, plus and minus tolerances, and the type of dimension (such as diametric or linear), helping to virtually eliminate manual input and reduce errors. It works with horizontal and vertical dimensions, split dimensions, notes, hole callouts, finish symbols, and geometric dimensioning and tolerancing (GD&T) symbols.

This means you can create your inspection documents regardless of your existing CAD system using the included standalone version of SOLIDWORKS Inspection.

Reduce time-to-market

SOLIDWORKS Inspection helps drastically reduce the time needed to generate inspection reports. In just a few clicks, you can create industry-compliant inspection reports (such as AS9102, PPAP, ISO 13485) or use the powerful template editor to develop a report that matches your company's needs.

In addition, SOLIDWORKS Inspection helps avoid errors and inconsistencies traditionally associated with manual data input.

You can save time, lower costs, and win more business by eliminating the bottlenecks in quality inspection and increasing throughput in manufacturing.

Help improve product quality and save money

Inspection documents can help your company significantly improve its manufacturing processes, reduce scrap, cut time-to-market, and improve product quality and reliability. Because SOLIDWORKS Inspection is easy-to-use, integrated with SOLIDWORKS CAD, and available as a standalone application to work with your existing CAD system, you can easily deploy it, train your quality department, and start to optimize your inspection and quality processes.

SOLIDWORKS MBD

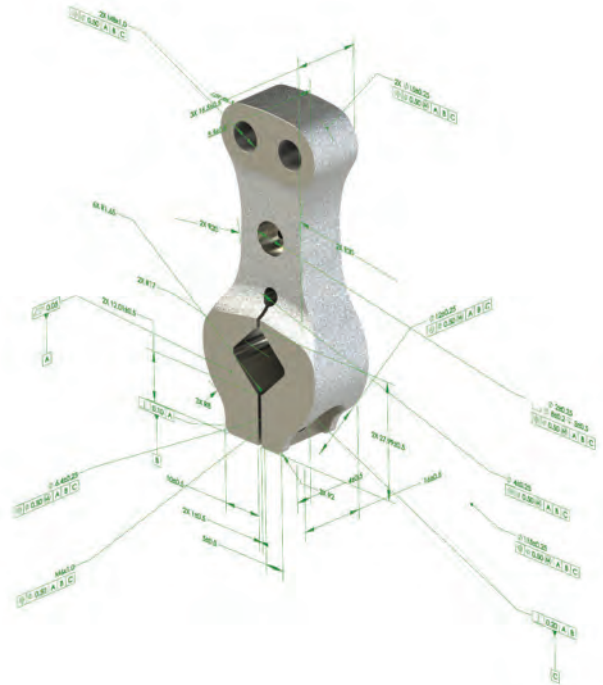
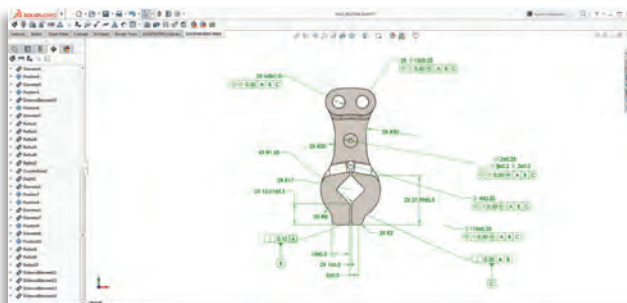
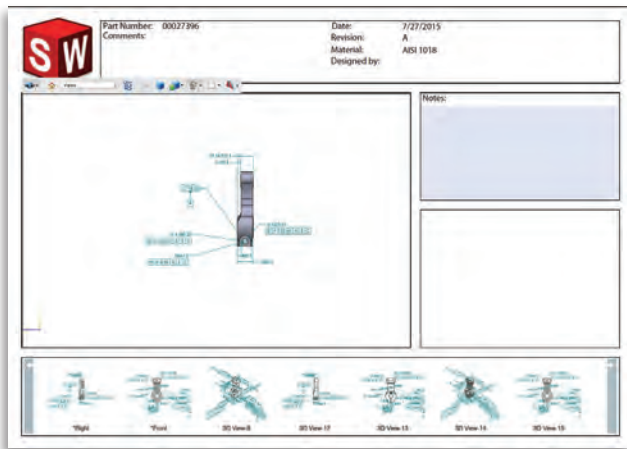
Drawing-less operation to streamline and accelerate production

SOLIDWORKS MBD (Model Based Definition) is an integrated drawing-less manufacturing solution for SOLIDWORKS 3D design software. SOLIDWORKS MBD guides the manufacturing process directly in 3D. You can define, organize, and publish 3D PMI, including 3D model data, in industry-standard file formats (such as SOLIDWORKS files, eDrawings®, and 3D PDF). Companies embracing model-based definition methodologies report savings from reduced manufacturing errors, decreased scrap and rework costs, and lower procurement costs for purchased parts.

SOLIDWORKS MBD puts data within the SOLIDWORKS 3D environment, such as product models, dimensions, geometric tolerances, surface finishes, welding symbols, BOMs, callouts, tables, notes, meta properties, and other annotations. Because all the information needed to guide the operation is integrated with the 3D models, traditional 2D drawings are no longer needed. The intuitive, interactive 3D PMI from SOLIDWORKS MBD serves multiple operational uses and helps groups across the operation, such as design, procurement, fabrication, assembly, quality, sales, marketing, clients, and suppliers.

Define PMI directly in 3D

SOLIDWORKS MBD defines PMI directly in 3D, avoiding the expense and time associated with developing 2D drawings, which can run up to 50 percent of total development cost. Creating 3D PMI also helps speed up communication, cut supplier quoting time, and reduce errors, thanks to 3D data interrogation, interactivity, and rich meta properties.



Present 3D data in a clean and structured fashion

Beyond 3D PMI definition, SOLIDWORKS MBD helps organize rich data into clean, structured 3D presentations with different views and display settings. It can even intelligently show and hide 3D annotations while you are rotating the model to give you extra clarity while still including critical-to-function annotations.

Customize 3D output templates

SOLIDWORKS MBD delivers a comprehensive set of predefined templates. Several aspects of the 3D Output Template, such as layout, company, or department logos; 3D viewport and thumbnails; text descriptions; meta-property links; and tables can be customized to address specific deliverables. Once set up, these templates can serve as internal and external process guidelines for all departments, such as manufacturing, operations, quality, and procurement.

Output and distribute 3D data to an existing process

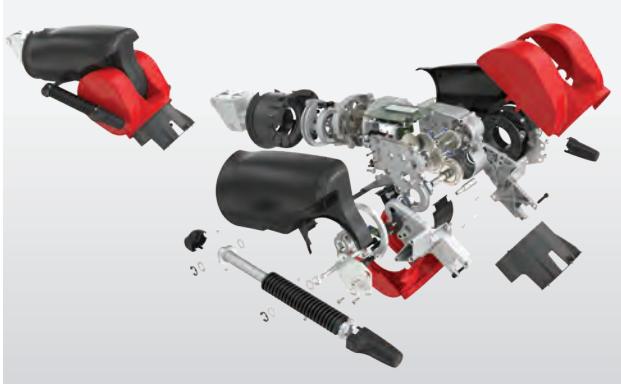
SOLIDWORKS MBD publishes widely accepted file formats, such as eDrawings and 3D PDF files that are often used in existing processes. eDrawings files can be opened in a free eDrawings Viewer. 3D PDF can be viewed using a variety of free tools including Adobe® Reader. In addition to providing associative information (such as engineering notes, BOM, and rich meta properties), you can also explore the model in 3D with Pan, Zoom, Rotate, Measure, Section, and other 3D tools.

Share, archive, and reuse intelligent 3D data

SOLIDWORKS MBD helps you directly share, archive, and reuse intelligent 3D data including geometry, PMI, views, and data so that you and your suppliers don't have to waste time creating traditional 2D drawings.

Work hand-in-hand with 2D drawings and printouts

SOLIDWORKS MBD integrates seamlessly with existing SOLIDWORKS 2D drawings. The PMI and views created in 3D are readily available for reuse in 2D. The built-in printout support, such as multiple 3D PDF viewports and multiple 3D PDF sheets, fits into your existing paper-based processes very easily.



SOLIDWORKS PRODUCT DEVELOPMENT SOLUTIONS

SOLIDWORKS software provides users with an intuitive 3D development environment that helps maximize the productivity of your design and engineering resources to create better products faster and more cost-effectively. See the full range of SOLIDWORKS software for design, simulation, technical communication, and data management at www.solidworks.com/products2016.

LEARN MORE

To learn more about SOLIDWORKS Technical Communications solutions, visit www.solidworks.com/technicalcommunication or contact your local authorized SOLIDWORKS reseller.

SOLIDWORKS systems requirements are posted on the SOLIDWORKS website at www.solidworks.com/systemrequirements.

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