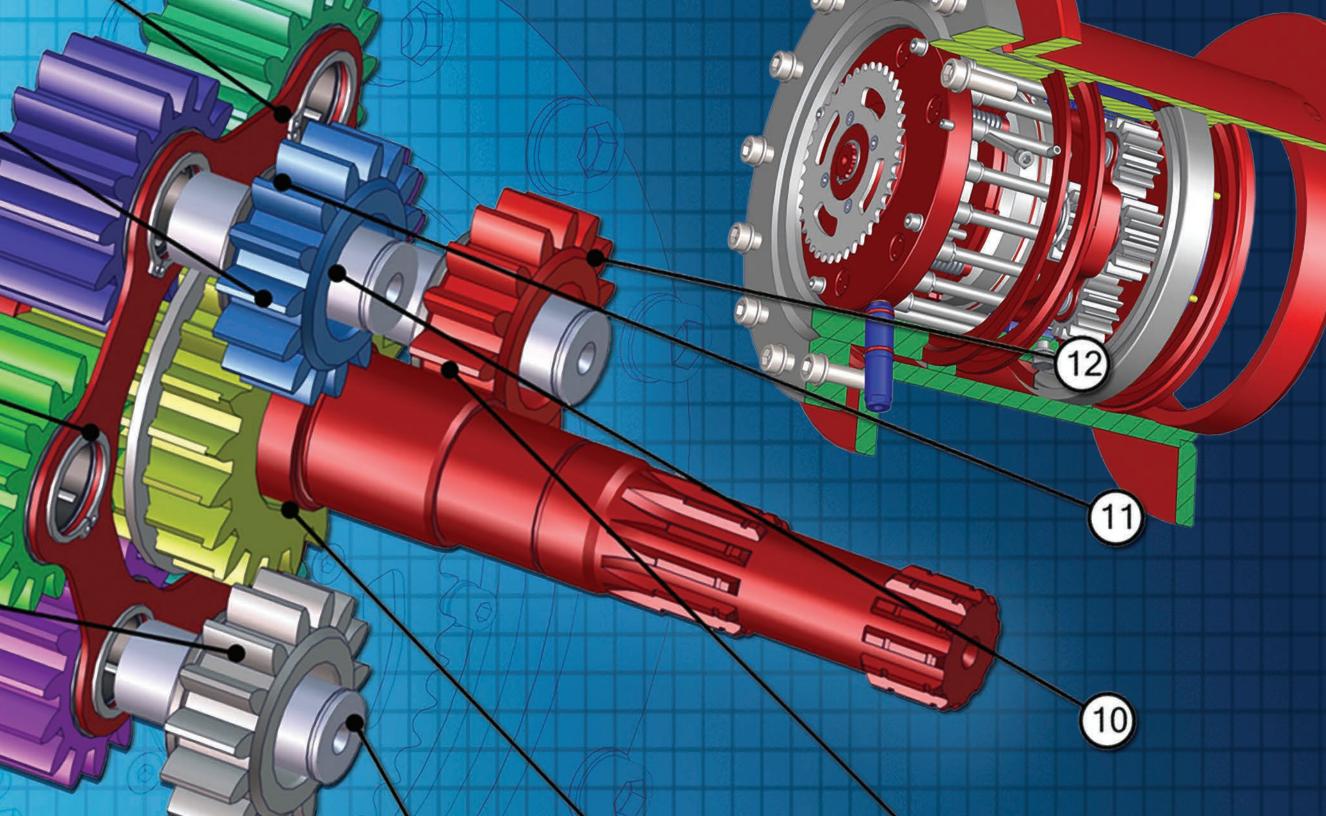
## **3S SOLID**WORKS



### **SOLIDWORKS COMPOSER**

CREATE ADVANCED 3D GRAPHICS FOR TECHNICAL COMMUNICATION





# SOLIDWORKS COMPOSER COMMUNICATE YOUR DESIGNS TO ANY AUDIENCE

Enable your engineers and nonengineers to reuse 3D solid models in popular CAD formats to rapidly create and automatically update high-quality graphical content, even 3D animations.

SOLIDWORKS® Composer™ software helps simplify the experience for users with tools that clearly and accurately present their design—how it works, how to assemble it, how to use it, and how to service it. The intuitive SOLIDWORKS Composer software lets even nontechnical users develop stunning 2D and 3D content in parallel with product development, helping to simplify their processes and accelerate time-to-market. SOLIDWORKS Composer helps you:

- Create accurate and up-to-date assembly instructions
- Quickly produce high-quality user manuals and product documentation
- Develop more vibrant, exciting marketing materials—including interactive videos
- Improve maintenance and training manuals that help reduce warranty costs
- Simplify the documentation process to keep pace with product changes and updates

## Here are examples of what SOLIDWORKS Composer can do, told through three SOLIDWORKS customers.







JL Audio

ARENS Controls

BAKER Drivetrain

## SPEED UP TIME-TO-MARKET

JL Audio, Inc. has grown to become one of the most respected speaker brands in the audio industry. The company is passionate about everything involving audio systems, including the materials used to assemble, install, and service its products. To help modernize creation of its documentation, JL Audio turned to SOLIDWORKS Composer to leverage SOLIDWORKS design data to concurrently develop documentation visuals.

Stephen Turrisi, director of Training and Technical Services, explains, "What we needed was a way to develop product visuals that would update as the design changes, so we could release documentation in formats that support digital devices as soon as the first units were ready to go."

The company's popular Stealthbox® line of hidden vehicle subwoofers is created using 3D scan data, enabling JL Audio engineers to design vehicle-specific, fiberglass enclosures. After the design process of two to three weeks, Stealthbox installation instructions were created a month later using digital photography and desktop publishing. Now with SOLIDWORKS Composer, the company can create documentation using the scan data and update visuals once the design is finished.

#### **Results:**

- Accelerated time-to-market by at least one month
- Produced higher quality documentation faster
- Leveraged QR code scanning technology
- Created documentation concurrent with design



"SOLIDWORKS Composer allows us to work with the design prior to its release, automatically update visuals, and output animated content, accelerating time-to-market by a full month."

Stephen Turrisi
Director of Training and Technical Services
II. Audio



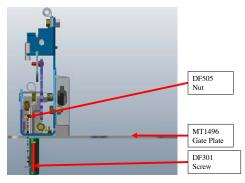
### **EASILY CREATE ARTWORK AND** INTERACTIVE ANIMATIONS DIRECTLY FROM 3D CAD DATA

Historically, creating documentation has been disconnected, complex, and time-consuming—not to mention an unwelcome burden if you're an engineer. With SOLIDWORKS Composer, you can leverage and repurpose 3D CAD data. Whether you need photorealistic renderings, exploded model views, or presentation-ready materials, SOLIDWORKS Composer streamlines the entire process. In fact, research suggests that SOLIDWORKS Composer helps cut the time it takes to produce images by 75 percent.



T79098 Work Instruction

Place Gate Plate onto Fixture 76-0166



• Mount Transmission Assy to Gate Plate with Screw (qty 4) and Nut (qty 4). Torque to 22 in –

Tools: 22 in - lb Air Gun, 6" Extension, 3/8" Socket, 1/8" T-Handled Allen Wrench, Paint

W-7-5-XXX Rev Date: 7/20/2011 approved By: Rob Schwartz



"Our engineers can capture assembly visuals from any angle they want, resulting in more clarity, better understanding, and less quesswork."

> Joseph Stefinsky **Engineering Services Manager ARENS Controls**

Leading original equipment manufacturers (OEMs) in the heavy-duty truck, offhighway construction, and agriculture markets rely on ARENS Controls for by-wire control systems, power management technologies, and innovative operator interface solutions. An important part of ARENS product development is the assembly instructions for its world-class controls and power management systems.

When ARENS needed a more efficient way to develop its work instructions, it turned to SOLIDWORKS Composer software, enabling engineers to leverage SOLIDWORKS models to create high-quality 2D and 3D imagery, illustrations, and interactive animations.

Manufacturing Engineer Rob Schwartz notes, "Trying to develop assembly instructions using a camera and Microsoft® Word is not the most efficient approach. Some of our 2,500 products were only assembled once a year, and if you missed a particular angle or failed to get the shots you wanted, the instructions would not be as complete as possible."

Leveraging high-quality CAD renderings and animations gave ARENS Controls greater flexibility to complete assembly documentation as soon as a design was released and handle change orders more efficiently.

#### **Results:**

- Cut assembly instructions development time by 66 percent
- Started assembly documentation earlier in the program by as much as one year
- Minimized reliance on digital photography
- Accelerated handling of design changes

# MARKET YOUR PRODUCTS MORE EFFECTIVELY

BAKER Drivetrain, Inc. is a leading manufacturer of motorcycle transmissions, primary drive units, and clutches for original equipment manufacturers (OEMs) and the motorcycle aftermarket. As their product line attracted more motorcycle hobbyists, BAKER needed easier-to-understand documentation and clearer installation instructions.

BAKER implemented SOLIDWORKS Composer software because engineers could use it to quickly and easily create instruction illustrations and exploded views directly from SOLIDWORKS models. According to Engineer Andy Friar, "We can communicate more effectively with customers, dealers, and production staff with visual depictions than with written descriptions, and the software helps us bring products and supporting documentation to market faster."

Next, the motorcycle accessory manufacturer turned to SOLIDWORKS Composer to help market its growing product line. The new BAKER website allows users to download rendered images created with SOLIDWORKS Composer that highlight hidden technical features, thus supporting marketing and sales.

"As our designs evolve in complexity and expand in ranges of fitment, we are seeing a customer base evolving at the same pace in their level of mechanical competency," Friar says. "With SOLIDWORKS Composer, we can create some real whiz-bang imagery that communicates more effectively."

#### **Results:**

- Cut documentation development time by 50 percent
- Reduced customer support telephone calls by 10 to 20 percent
- Improved clarity of installation instructions
- Supported requirements of broader motorcycle accessories market



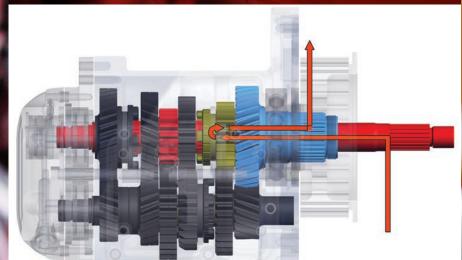
"Using SOLIDWORKS Composer, our illustrations are super clear, crisp, and user-friendly."

> Andy Friar Engineer BAKER Drivetrain



## YOUR MARKETING MATERIALS CAN LOOK AS GOOD AS YOUR PRODUCT DESIGN

SOLIDWORKS Composer makes it possible to promote your products with rich full-color graphics and interactive 3D animations created directly from 3D CAD data. Now you can create dynamic artwork for a range of materials. And with interactive animations, you can give your customers the opportunity to experience your products virtually before they buy—a highly effective way to help close a sale. SOLIDWORKS Composer does it all without adding time to your development process.

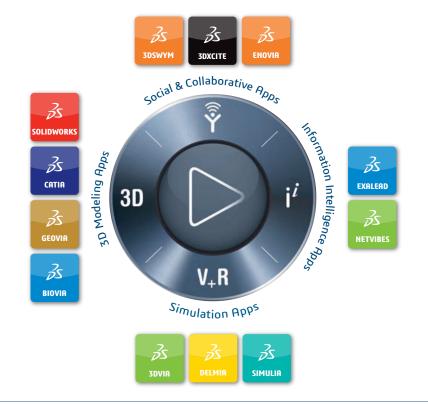




PRODUCT FEATURES	SOLIDWORKS COMPOSER	SOLIDWORKS COMPOSER ENTERPRISE SYNC	SOLIDWORKS COMPOSER PLAYER (NO CHARGE)
Import SOLIDWORKS, CATIA®, Pro/Engineer® (read only)	•		
Update content with latest design changes (geometry, BOM tree, metadata)			
Create step-by-step procedures showing incremental components	<b>•</b>		
Capture exploded views with automated trail lines	•		
Add annotations (auto balloons, BOM table, arrows, detail views, and more)	•		
Change appearances (hide/show, transparency, colors)			
Create manufacturing BOM independent of engineering BOM	•		
Customize parts lists and properties for each view	•		
Create keyframe animation by drag-drop views on timeline	•		
Create interactive storyboards by adding links to relevant views			
Animate appearances and custom properties	•		
Interactive animation with markers	•		
Filter timeline keys for finer control	<b>&gt;</b>		
Update animation with latest design changes	•		
Static images (raster graphics and vector line art)	<b>&gt;</b>		
Dynamic AVI videos (multiple codecs supported)	•		
Interactive 3D documents (as lightweight executable)	<b>•</b>		
Interactive 3D PDFs and web pages	•		
Protect intellectual property (secure 3D brush, rights manager)	•		
Standardize styles for creating content (balloons, labels, annotations)	•		
Standardize profiles for publishing content (raster, vector, video, views, BOM)	•		
Standardize default document settings (import, output qualities, security rights)	•		
Publish consistent quality with paperspace (WYSIWYG—What you see is what you get)	<b>&gt;</b>		
Automate content creation by using custom API programs	•		
Automate batch mode import of 3D files and publishing content		<b>&gt;</b>	
Automate document creation within existing workflow systems		<b>&gt;</b>	
Automate document translation by using custom XML program		<b>&gt;</b>	
Rotate, zoom, animate, measure, view BOM, section (rights controlled by author)			<b>•</b>
View step-by-step interactive instructions with no additional UI			<b>&gt;</b>
Create custom applications to distribute internally or over website			•

For more details about SOLIDWORKS Composer, visit www.solidworks.com/composer.

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