

ID GROUP, INC. COMMUNICATING PRODUCT CONCEPTS MORE QUICKLY AND EFFECTIVELY WITH SOLIDWORKS VISUALIZE PROFESSIONAL SOLUTIONS

Case Study



The ID Group relies on SOLIDWORKS Visualize Professional software to more efficiently and cost-effectively communicate design concepts to clients via photo-realistic renderings, such as presenting this rendering of the interior design of a commercial airliner instead of having to build a physical mock-up of a portion of the fuselage.

Challenge:

Improve the ability to effectively communicate design concepts to product development clients without having to invest time and money in the creation of physical mock-ups.

Solution:

Implement SOLIDWORKS Visualize Professional photo-realistic rendering and augmented reality software.

Results:

- Reduced rendering times by factor of 10
- Shortened product time-to-market
- Sped up development process
- Eliminated cost of creating physical mock-ups

ID Group, Inc. has provided industrial design, product development and prototyping services to commercial corporations, design industry specialists and entrepreneurial businesses for nearly two decades. The California product development consultancy has developed a multitude of successful products in markets ranging from consumer products, transportation systems and medical devices to industrial equipment, furniture and architectural structures.

The ID Group frequently needs to present product concepts and designs to its customers. To remain competitive, the firm has to communicate different types of product design information as effectively, efficiently and affordably as possible, according to ID Group President/Industrial Designer Jeremy Wilkens.

“Our product development work varies depending on the customer,” Wilkens explains. “Sometimes, the client comes to us with a product concept, and we complete the design aesthetics, product ergonomics and/or user interface. At other times, we take the required function and completely develop the product from initial concept and industrial design up through the prototype engineering level. While we have a fully capable in-house prototyping shop, we often need to communicate design information without having to absorb physical mock-up or prototyping costs, for which we need efficient photo-realistic rendering and virtual reality simulation tools.”

For example, with large airplane interiors, the ID Group needs to show what the interior design of the airplane looks like without having to build a large-scale physical model. “We need our clients to be able to experience the interior space of an aircraft in real time without having to build a 20- to 30-foot section of fuselage,” Wilkens stresses. “It’s more cost-effective—both for us and our customers—to communicate design information through high-quality renderings or 3D-simulated environments.”

To satisfy its design visualization needs, the ID Group uses SOLIDWORKS® Visualize Professional photo-realistic rendering software. The design consultancy chose SOLIDWORKS Visualize Professional software because it is easy to learn,

can quickly produce high-quality renderings, carries lower training requirements and costs, and works with various types of CAD data other than SOLIDWORKS. “What I really liked about SOLIDWORKS Visualize Professional is its emissive lighting capabilities, rendering speed and short learning curve,” Wilkens says. “It’s faster for us to train new employees on SOLIDWORKS Visualize Professional, which reduces our training costs.”

ACHIEVING HIGHER LEVELS OF TANGIBILITY

Using SOLIDWORKS Visualize Professional software, the ID Group can achieve higher levels of design tangibility—the ability to obtain as much information about an object as is provided by holding it in your hands—from a virtual environment. This is becoming critically important as product development includes more non-technical contributors, who may have difficulty understanding a standard CAD image or extrapolating 2D engineering drawings into 3D.

“Increasingly, we are designing products for not just one person, but a committee made up of design, engineering, marketing, sales and business personnel,” Wilkens explains. “When dealing with new, innovative concepts, if just one person cannot visualize or comprehend the importance of a design concept, we can have problems, such as justifying an increase in the tooling budget to accommodate new features or innovations that can boost sales. With SOLIDWORKS Visualize Professional, we can quickly generate tangible renderings to tell the full story, and reduce these types of communication issues.”



“The high-quality renderings that we produce with SOLIDWORKS Visualize Professional help to build consensus within large organizations and streamline the process, which saves a huge amount of time and money.”

— Jeremy Wilkens, President/Industrial Designer

FASTER DEVELOPMENT, CONSENSUS-BUILDING

With SOLIDWORKS Visualize Professional software, the ID Group not only obtains customer consensus and approvals more quickly, it also speeds up the product development process and shortens time-to-market. “The high-quality renderings that we produce with SOLIDWORKS Visualize Professional help to build consensus within large organizations and streamline the process, which saves a huge amount of time and money,” Wilkens stresses.

“The new AI Denoiser feature in SOLIDWORKS Visualize Professional has been a real game changer in terms of rendering speed,” Wilkens adds. “Rendering a long, simulated fly-through, for instance, has gone from weeks to a few days because every frame is rendered 10 times faster, and overall rendering speed has increased by a factor of 10.”

FROM VIRTUAL TO AUGMENTED REALITY

The ID Group is also excited about using the augmented reality capabilities that are being developed for a future release of the software. "I recently saw an early augmented reality demo for SOLIDWORKS Visualize Professional and immediately recognized its utility," Wilkens says.

"Instead of building a full-size fuselage tube of an aircraft interior or using a static image for visualization, we'll be able to put virtual or augmented reality goggles on our clients and let them immerse themselves inside the aircraft," Wilkens continues. "With this type of capability, customers will be able to visualize the interior as well as make changes to the trim, finish or even the entire architecture, from within the immersive environment. This will improve visualization and further streamline the product development process."

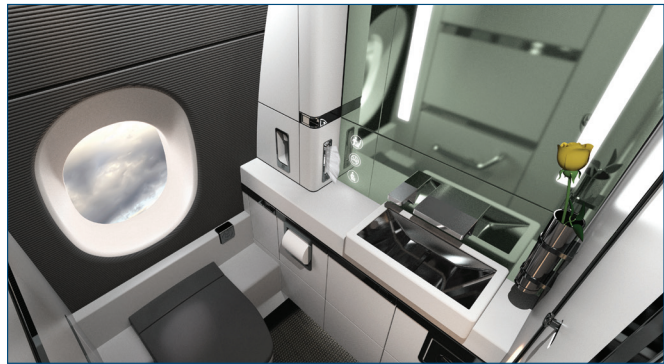


With SOLIDWORKS Visualize Professional software, the ID Group can achieve the higher levels of design tangibility regarding the look and feel of a design concept without incurring the time and expense of building a demonstration prototype, resulting in faster consensus-building and shorter times-to-market.

Focus on ID Group, Inc.
VAR: Go Engineer, Santa Ana, CA, USA

Headquarters: 15262 Connector Lane
Huntington Beach, CA 92649
USA
Phone: +1 714 379 9000

For more information
www.idgroup-inc.com



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 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.

