PhotoWorks release 2 Product Overview

PHOTOREALISTIC RENDERING SOFTWARE, FULLY INTEGRATED WITH SOLIDWORKS 3D MECHANICAL DESIGN SOFTWARE

PhotoWorks™ software is a best-in-class rendering solution for creating photo-realistic images from 3D CAD models. Add impact to presentations and proposals with the only rendering software fully integrated with SolidWorks®, the standard in 3D mechanical design software.

Generate compelling images for presentations and proposals. Why settle for standard shaded views of your parts and assemblies when you could be communi-cating design concepts more powerfully with photorealistic images?

Create advanced visual effects. Generate photorealistic images of 3D models easily using commands available on the PhotoWorks menu and toolbar. PhotoWorks software is built on mental ray®, the leading high-performance rendering engine. The software includes an extensive library of materials and textures, user-defined lighting and shadows, background scenery, and more. Select appropriate material characteristics for your SolidWorks parts and assemblies. Preview a variety of materials and settings before applying them to the model. Set the background, lighting, and scenery conditions. Combine with SolidWorks Animator to create photorealistic rendered animations.

Reduce prototyping costs and cut time-to-market. PhotoWorks release 2 lets you demonstrate how your design will look without expensive mock-ups, prototypes, or studio photo sessions. Speed review cycles, market product concepts before manufacturing even begins, create images for sales and service documentation, and reduce time-to-market.

Rendering controls

- Preview shaded renderings with texture mapping, ideal for scene composition.
- Select "on demand" ray-tracing for reflective and transparent materials.
- Improve image quality by smoothing areas of high contrast and eliminating "jaggies" along silhouette edges utilizing adaptive anti-aliasing.
- Use contour rendering to highlight edge contours or show edges of parts that are otherwise hidden.

Materials

- Choose materials from a wide selection of built-in libraries of predefined metals, woods, stones, plastics, and other textured material types.
- Define or modify existing material properties, including surface color, reflectance, transparency, roughness, and texture-mapping.
- Apply materials to entire parts, features, or individual faces, allowing multiple assignments per part.
- Access and organize previous material selections easily with the archive feature.
- Preview material, scenery, and light selection to reduce rendering time.
- Select displacement properties to give materials an irregular or indented appearance.

Communicate design concepts more powerfully using photorealistic images and advanced effects available in PhotoWorks release 2.

Image courtesy of DiMonte Group.

SolidWorks

Decals

- Create and apply custom labels or artwork to products and packaging.
- Specify the size, position, and transparency of individual decals.
- Overlay multiple decals onto any SolidWorks part, feature, or face.

Geometry

- Take advantage of full support for SolidWorks models, including section views and exploded assemblies.

Lights and shadows

- Enhance realism with indirect illumination, which allows light to bounce off surfaces.
- Control shadows easily, including those shadowing through transparent surfaces.
- Create realistic shafts of light with fog lighting.

Background/scenery

- Create photo studio-style backdrops to enhance the display of SolidWorks parts and assemblies.
- Preview, resize, and reposition background scenery.
- Apply predefined scenes, including lights, backgrounds, and scenery.
- Simulate environments in which products will be used, such as under a blue sky with light cloud cover or in an industrial setting.
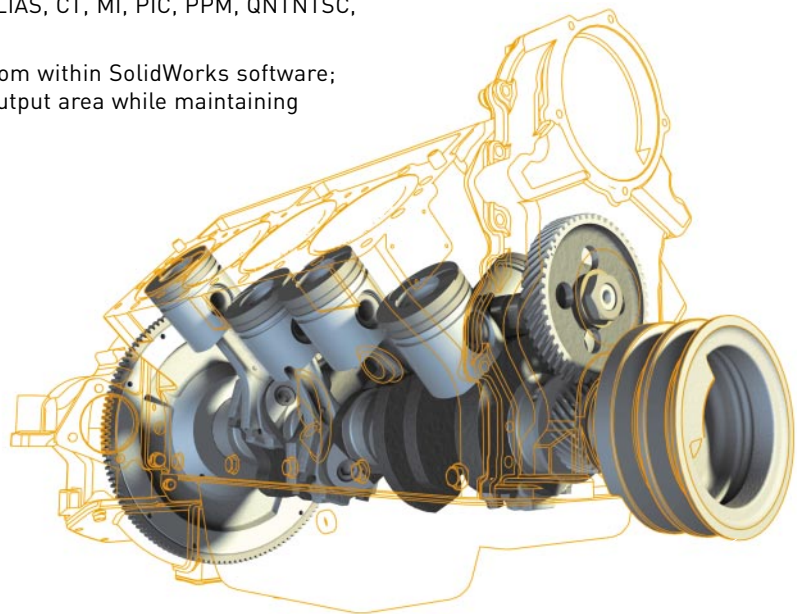- Import backgrounds from standard image-format files (JPEG, TARGA, TIFF, BMP).

Image output

- **To window:** Output rendered images to the SolidWorks window, or use Interactive Rendering mode for fast, efficient on-screen preview.
- **To file:** Render images to file at user-defined output resolution as 24-bit PostScript®, JPEG, TARGA, TIFF, BMP, EPS, ALIAS, CT, MI, PIC, PPM, QNTNTSC, QNTPAL, RGB, RLA, and RLB.
- **To printer:** Print rendered images directly from within SolidWorks software; resize the image to cover the entire printed output area while maintaining aspect ratio if desired.

Local language support

- Chinese
- English
- French
- German
- Italian
- Japanese
- Korean
- Polish
- Russian
- Spanish

Using PhotoWorks, you can create powerful photorealistic effects using materials, indirect illumination, scenes, environments, and shadows.

Image on left courtesy of bxhdesigns.com
Image on right, UAMZ