Schwing America

Schwing America Finds Adobe Photoshop 3.0 for Sun an Integral Tool for Editing and Enhancing Its Technical Illustrations

Adobe Photoshop™
for Sun™

Jay Tepfer and Jim Kramlich, publication specialists, Schwing America Inc.

Key Benefits Summary

- The combination of Adobe Photoshop 3.0, Adobe Illustrator™ 5.5 and Acrobat™ Distiller™ software enable Schwing to easily combine and edit multiple types of files, including CAD files.
- Adobe Photoshop for Sun provides the power necessary to work with very large, high-resolution files.
- The new features of Adobe Photoshop 3.0 for Sun make the software easier to use.

Creating complex black-and-white parts books and service manuals for industrial concrete pumps requires creation and manipulation of detailed and accurate graphics and illustrations. Jim Kramlich and Jay Tepfer, publication specialists at Schwing America, pride themselves on the quality of their work. Using a host of Adobe software products to produce line art and photographic enhancements, Kramlich and Tepfer produce upwards of 800 illustrations per year for their parts books, service manuals, and sales brochures. Adobe Photoshop 3.0 for Sun workstations is an integral tool for making their publishing process hum.

Schwing GmbH., with headquarters in Herne, Germany, is the leading manufacturer of both truck and trailer-mounted concrete pumps. Its North American subsidiary, Schwing America, Inc., headquartered in St. Paul, has branches in Toronto, Dallas, Tampa, and northern and southern California and manufactures a full range of concrete pumps and ready-mix recyclers.

Combining CAD Files, Images, and Photographs

For each pump, Schwing produces parts books that are distributed to customers for ordering replacement parts. Parts books are made up of many illustrations that comprise line art, photographs, and scans of the various pump assemblies. Each illustration is complete with leader lines and item numbers to make parts information clear to customers.

To produce a parts book, Kramlich and Tepfer first gather or create various source materials. They take photographs or create sketches that show the pump's assemblies. They then create original line drawings in

Adobe Illustrator 5.5 for Sun and scan existing art or photographs into Adobe Photoshop 3.0 for Sun where they are cropped, retouched, and cleaned up. Often, the team must also integrate existing CAD files into their work. Original pump design is usually done at company headquarters in Germany and sent to the United States for local modification. In these cases, Kramlich and Tepfer receive Medusa Draft CAD files from Germany or Autodesk® AutoCAD® files from other U.S. locations. In order to integrate these CAD files into a parts book, Kramlich and Tepfer save the files as PostScript™ language files, and then convert them to the Adobe™ Portable Document Format (PDF) using Acrobat Distiller. The PDF files are then imported into Adobe Illustrator or Adobe Photoshop for editing. In this way Kramlich and Tepfer can use their original CAD files to reflect structural changes necessary for the U.S. marketplace. "We often have to work with and edit AutoCAD or Medusa Draft files. This process becomes totally painless using a combination of Adobe software for converting between file formats and editing images," says Kramlich.

Adobe Photoshop 3.0 Streamlines the Process

Tepfer does most of the image manipulation and editing work for the parts books and is impressed with the features of Adobe Photoshop 3.0 for Sun workstations. "Cleaning up scans is so easy with version 3.0, especially with the Dust and Scratch filters," says Tepfer. Tepfer creates many images with multiple layers. He keeps illustrations separate from the parts' call-outs and leader lines using the Layers feature in Adobe Photoshop. "Layering is great,

because I can change a call-out or move a leader line without having to worry about changing the image itself," he says. Kramlich and Tepfer frequently work with very large files. "I'm impressed with the speed of Adobe Photoshop 3.0 for Sun, especially for transferring very large scans or photographs," says Tepfer. "The improved user interface, including the palette design, is another feature that makes work more flexible, faster, and easier."

After Kramlich and Tepfer gather and edit all of their line art and photographs, they add leader lines pointing to specific parts and accompanying item numbers to ensure that the customer understands which part to order. They then put the files into a database, and generate a parts list based on the images. Kramlich has automated the page assembly process, using UNIX® Shell scripts to size and place the parts list and the illustration automatically into a FrameMaker® document. This file, and many others, are then compiled into a book using the FrameMaker program. From there the file can be paginated and printed to create a high-quality black-and-white master parts book.

Kramlich often must use illustrations created in the past using a variety of software applications. He recently decided to streamline the production process by converting all files to one consistent format. Kramlich uses the Acrobat Distiller program to convert the various files into PDF. These files are opened in Adobe Illustrator or Adobe Photoshop software for editing. Then they are used in Kramlich's automated page assembly process. "Having all of our files in one format allows us to streamline our production process. We use Acrobat Distiller to convert everything over to Adobe

Photoshop or Adobe Illustrator, since we consider them the best image manipulation and illustration packages available for UNIX," says Kramlich.

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—Jim Kramlich,
publication specialist,
Schwing America

Providing Better Customer Service

Often, Schwing America customers request custom paint jobs on their pumps. Using Adobe Photoshop for Sun, Kramlich and Tepfer can now provide customers with a digital preview of their proposed custom paint job which might include a company name, logo, special colors or other details. "We colorize and add the other elements to a side view of the pump using Adobe Photoshop 3.0 for Sun. Then the customer can evaluate it and make changes to the design before we paint it. It's a nice service we can provide for customers, and we can do it because of Adobe Photoshop," says Kramlich.

Looking to the Future

Although the printed parts books are currently Kramlich and Tepfer's primary responsibility, they are starting to produce marketing materials as well. "Occasionally, we will be asked to create small quantities of a four-color brochure for a high-end

product. It isn't cost-effective to go to an outside production house for such a small run of brochures. Using Adobe Photoshop and Adobe Illustrator for Sun, we can produce the brochures in-house at a fraction of the cost of using an outside vendor," says Kramlich.

Schwing America is also planning to create its own World Wide Web page to post sales literature and parts information on-line. "Producing 'just-in-time' sales and support literature will really save the company money. With Adobe Photoshop 3.0 for Sun, we already have the tools in place to create beautiful color graphics for eye-catching, on-line materials, on a platform that is ideally suited for Internet publishing," says Kramlich.

"The beauty of Adobe software products, especially Adobe Photoshop 3.0 for Sun, is that they provide us with the power and flexibility to work with almost any kind of file—including CAD files—in a quick, efficient way. They definitely have a positive impact on the quality of our work and save time getting it done," says Kramlich.

**Schwing America
Systems at-a-Glance**

Hardware
Hewlett-Packard LaserJet 4si
Ricoh® grayscale flatbed scanner
Sharp 330JX color scanner
Sun SPARCstation® 5 with 32 MB of RAM and
 1 GB of storage
Sun SPARCstation 10 with 32 MB of RAM and
 5 GB of storage

Software
Adobe Acrobat
Adobe Illustrator
Adobe Photoshop
Autodesk AutoCAD
CADleaf Batch
Common Link
FrameMaker
Medusa Draft
Open Scan