

Agnew Moyer Smith

Key Benefits

- Technically precise, while allowing for full artistic expression.
- Provides an intuitive and elegant implementation of drawing and editing tools.
- Flexible, powerful modifier keys permit instant accessibility to editing tools.
- Plug-in tools provide increased productivity.
- Rasterization of objects from within the Adobe Illustrator enhances creativity.
- Built-in color separations save vital production time.
- Unique tool for quickly visualizing and realizing complex, multi-component projects.

Adobe Illustrator: The Design Tool for the Future

Located in Pittsburgh, Pennsylvania, Agnew Moyer Smith (AMS) is a 28-person design firm providing communications planning, design, and writing services to clients nationwide. Within that broad spectrum of services, AMS has specialized in the creation of highly detailed technical renderings using Adobe Illustrator software. These detailed technical illustrations range from full architectural plans depicting the conversion of an airplane hangar to a museum, to industrial products and details of the City of Pittsburgh's rail system. Among their most ambitious projects is the ongoing Steelcase Office Furniture specification tool project depicting the entire Steelcase system of products in a variety of viewpoints, including isometric perspective.

“Most of what we do for Steelcase involves small technical illustrations that depict systems office furniture,” says Rick Henkel, illustrator at AMS. “Every illustration shows different aspects of the furniture in minute detail so that people can see how components go together—or, in some cases, how they cannot go together. We try to explain all of the ins and outs so that people can understand the intricacies required to assemble the various elements. It's an incredibly time-saving solution for both Steelcase and its customers.”

The Best Tool for the Task

Although it might seem that the use of a CAD drawing program might be a better tool for such technical illustration, AMS remains convinced that Adobe Illustrator is the superior tool. “We use Adobe Illustrator instead of a CAD drawing program because it is a more elegant solution. Adobe Illustrator allows us to create much more beautiful renditions than a CAD program could ever do,” says Henkel. “Although we've frequently tried CAD programs, we inevitably find ourselves disappointed. Often, we simply reject a program because it doesn't handle Bézier curves as well as Adobe Illustrator. Adobe Illustrator is the best choice by far.”

The illustrators at AMS establish a real-world scale for each project, and then use numeric input to construct and transform their technical diagrams. They have

developed a formula to convert diagrams into isometric perspective using the Scale, Skew, and Rotate tools. AMS can then use numerically set “cursor keys” or the Move command to assemble and then vary the assembled components. “There is a transparent logic to how the Adobe Illustrator dialog boxes are set up that allows for a rapid-flowing, as-quick-as-I-can-think process—all made simpler by the intuitive keyboard shortcuts. As with every process, there is an obvious way to approach everything in Adobe Illustrator.”

“Our decision to stay with Adobe Illustrator in lieu of its challengers was made partly because we save an immense amount of time. First by using Adobe Illustrator shortcuts, and then by reusing templates and parts of our already-completed illustrations,” says Henkel. “Although I’ve seen colleagues create individual objects with other programs that might look impressive at first glance, no one seems to be able to figure out how to make complex shapes come together. These are tasks that I can perform in Adobe Illustrator so easily.”

Further, AMS principal Don Moyer remains convinced that Adobe Illustrator will continue to lead the industry by adding new innovative features. “We believe that in remaining loyal to Adobe Illustrator we are on a path that will continue to unfold, and each successive release of the program shows us another step in the unfolding,” says Moyer.

Elegant Execution

Henkel, who was hesitant to learn both the computer and Adobe Illustrator back in 1987, is one of the AMS artists who, as Don Moyer describes, seems to “dream in Adobe Illustrator.” “The quality of work that I do now, compared to the quality of work that I produced ‘on the boards’ before the computer, has improved dramatically. Adobe Illustrator has transformed me from an unhappy worker to someone who really enjoys what I do,” says Henkel. “Adobe Illustrator is so incredibly intuitive and precise, and it makes so much common sense—the way the program works, the key-stroking and shortcuts that are written into the program—all allowing for incredible manipulation of lines and curves.”

Moyer concurs, adding, “I think of Adobe Illustrator like the good fit of a hand tool. When you pick up a hammer, or a saw that’s been well-made and nicely balanced, it is a natural extension of you. I think that’s what’s happening with Rick Henkel when he’s using Adobe Illustrator. It’s a natural extension of the way he’s thinking about his tasks, and it’s always there for him to do what he needs to get done. It’s a natural flow, like watching a musician play an instrument. And, it’s a pleasure to watch!”

Forever Expanding

Henkel is thrilled with the ever-expanding Adobe Illustrator tool set. “Pathfinder filters have simplified my work tremendously. I’m particularly fond of Unite, Intersect, and Exclude. Having those tools to further simplify my process has saved me *hours*. Having the filters now available from their own floating palette will even further streamline the design process.”

For the artists and art directors at AMS, perhaps the most exciting features in Adobe Illustrator 6.0 are the ability to rasterize images and colorize transparent 1-bit raster

files. First, they use the Layers feature in Adobe Illustrator to organize and separate the various objects and bitmapped elements. Then they move on to the primary application of the new raster and colorize 1-bit TIFF features. “Now we can integrate Adobe Photoshop™ plug-in filters from within Adobe Illustrator to apply filter effects to portions of an image,” says Henkel. “This allows us to combine painterly layers of colors with a crisp mechanical line to produce new types of images which are much ‘higher end.’ Mixing the softer painterly look with the crisp technical line is important in creating insightful, detailed drawings that can create impressions of semi-transparency and see-through layers to reveal what’s happening inside an object. The idea of seeing both the outside and the inside of an object at the same time solves an age-old communication problem.”

“While the ability to rasterize within Adobe Illustrator means fewer trips back and forth to Adobe Photoshop,” says Moyer, “it also makes the process of working between the two programs much easier. Implementing Drag and Drop, both from within Adobe Illustrator, and between Adobe Illustrator and Adobe Photoshop essentially provides us with another level of Undo, with the added power allowing us to preserve the contents of the Clipboard.”

Moyer is also enthusiastic about the built-in color-separations feature in version 6.0. He says “In the past, we had to jump to another program to generate the color-separations for our Adobe Illustrator images,” he says. “Now, we don’t have to take that extra step. And when you’re trying to get a lot of work done in a hurry—skipping steps like that is important.”

In addition to Adobe Illustrator, Moyer uses Adobe Dimensions™ to quickly place geometric shapes (cubes and cylinders) within a space as a way to sketch views and evaluate alternative perspectives in which to display something. “This provides me with a quick model to discover the angle that works best,” says Moyer. “I can then use this as the basis for a drawing. Other times we will use Adobe Dimensions to revolve or extrude Adobe Illustrator profiles or to project a graphic onto a surface to simulate packaging.”

Another Adobe product that AMS uses is Adobe Fetch™. “With the support of thumbnail previews, we’ve begun building an Adobe Fetch archive to catalogue illustrations and parts of illustrations for easy access and reuse.” says Moyer. “We can create our own libraries of archives that are available on our network for everyone to access.”

A Tool for Visualization

It is one thing to replicate a traditional task with the computer, and it is quite another to create something new that couldn’t have been produced traditionally. Don Moyer believes that Adobe Illustrator allows AMS to produce work that couldn’t have been produced any other way. “We are now able to produce books that communicate extensively with pictures, whereas without Adobe Illustrator these books wouldn’t even exist. Because we already have the components of the illustrations archived and the techniques are mastered, instead of having a book with one picture (as we might have only had the time or the budget to complete one drawing traditionally), now we can

create dozens of drawings. And as a result, communication is stronger. Suddenly we can be a super-power because we can be so productive.”

Summarizing AMS’s commitment to Adobe Illustrator, Moyer says “Adobe Illustrator is a graphic arts illustration tool. It provides us with exquisite control over line weight, color, shading, and curves—all the things that we’ve come to expect in our illustrations. And we can’t get that control in any other program.”

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Systems at-a-Glance

Hardware

Apple Macintosh

Apple Power Macintosh®

Software

Adobe Illustrator

Adobe Dimensions

Adobe Type Library

Adobe Fetch

Adobe Photoshop

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