

Designbrand

Successful product design firm improves design creation and handles review cycles twice as fast using Adobe® Acrobat® 9 Pro Extended and Adobe Creative Suite® Master Collection

Designbrand

www.designbrand.co.nz



Industry

Industrial Design/Engineering

Challenges

- Reduce product design costs
- Shorten time to market for new designs
- Deliver reliable, easily viewable 3D designs
- Safeguard intellectual property

Solution

- Document-based design collaboration
 - 3D design review
- Designbrand is using Adobe Acrobat 9 Pro Extended software to accelerate and simplify design review cycles with clients and manufacturing partners.

Results

- Streamlined development from concept through prototype to final production
- Reduced prototype review cycles by weeks
- Reduced prototype development costs by potentially thousands of dollars per project
- Accelerated production and time to market
- Achieved greater control over file access and content integrity, helping protect intellectual property
- Minimized manufacturing errors by identifying problems earlier

Systems At A Glance

- Adobe Acrobat Pro 9 Extended
- Adobe Creative Suite Master Collection

Innovating design and business

As one of New Zealand's leading product design firms, Designbrand works with a wide variety of local and international clients. From designing mass transit equipment to creating systems for magnetic resonance imaging, the firm is an established design innovator.

The same zeal for innovation that fuels the firm's design practice is evident in its business processes. "So much of what we do relies on clear communication and efficient collaboration," explains Jurgen Brand, principal of Designbrand. "We need best-in-class technologies that not only capture all the details of our designs but are also easy enough for our clients and partners to use."

For Designbrand, a combination of Adobe solutions—Adobe Creative Suite Master Collection and Adobe Acrobat 9 Pro Extended software—delivers the requisite power, flexibility, and ease of use.

Bringing designs to life

One of Designbrand's strengths is its ability to streamline traditional design processes by incorporating more automated workflows. After an initial client meeting, Designbrand industrial designers sit down with a pencil in hand to sketch a series of drafts for clients. The hand-drawn images are scanned onto desktop computers, where Adobe Illustrator® software is used to convert the scanned drawings to more versatile vector images. Color, shading, and other similar effects are added to the images for easy review and visualization.

"Most clients have a hard time visualizing concepts on their own," says Brand. "Seeing full-color, maneuverable images helps them get a clear understanding of the process for taking their concept through to completion. Adobe Creative Suite helps us make that happen."

Finalized design concepts are converted to PDF files for electronic delivery to clients. If modifications are needed, clients can simply use the free Adobe Reader® to add digital comments to PDF files to indicate where changes should be made.

Simplifying review with 3D models

Once initial concepts are finalized, Designbrand staff begins the detailed design phase to create product designs ready for manufacturing. All 3D designs are created using Rhinoceros 3D modeling software from Robert McNeel & Associates and then converted to platform- and application-independent PDF files using Adobe Acrobat 9 Pro Extended.

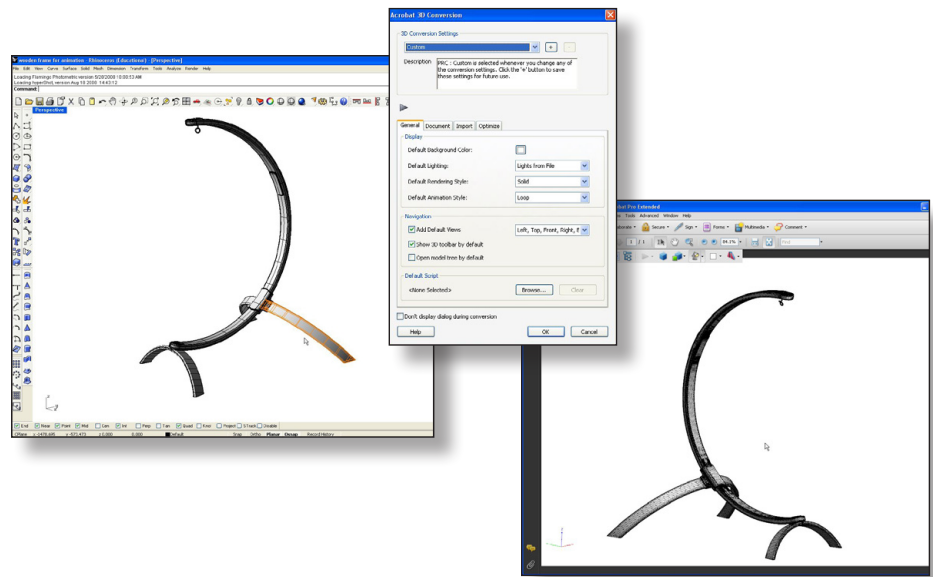
"Most small manufacturers do not have the resources in-house to view files in native applications," says Brand. "Adobe Acrobat 9 Pro Extended allows us to convert 3D models to PDF files that clients can view using free Adobe Reader. It brings a level of immediacy to our work and gives clients quick insight into product designs, without having to purchase additional software."

Also essential for Designbrand is the level of control that Acrobat and PDF bring to the firm's processes. "We can lock content in PDF files to prevent recipients from making changes, helping to ensure the integrity of our original design ideas. Equally important, we can password protect files to bring greater control over who can and cannot access our intellectual property," explains Brand.

The simplified review process delivers big returns for Designbrand and its clients. As manufacturing costs continue to rise, the need to further eliminate design errors early on is critical. In the past, review documents were distributed on paper, resulting in lengthy review timelines and increased costs.

"We can now share 3D PDF files with our clients, who can in turn deliver these files to their suppliers and manufacturing partners. This keeps everyone on the same page and sets accurate expectations from the beginning," explains Brand.

Using Acrobat 9 Pro Extended software, Designbrand converts designs created in Rhinoceros 3D modeling software into interactive 3D PDF models. Clients and designers can collaborate on product designs in real time, rotating models and comparing and measuring product elements.



From concept to prototype

For industrial designers, traditional prototyping processes can be costly and time-consuming. For example, building a 3D physical prototype for a simple product can take a week or longer and cost thousands of dollars. With products going through multiple iterations, the costs and delays can add up quickly.

"We can save thousands of dollars and literally cut weeks off prototyping and review cycles with Acrobat 9 Pro Extended. The streamlined processes can accelerate product time to market, a priority for our clients."

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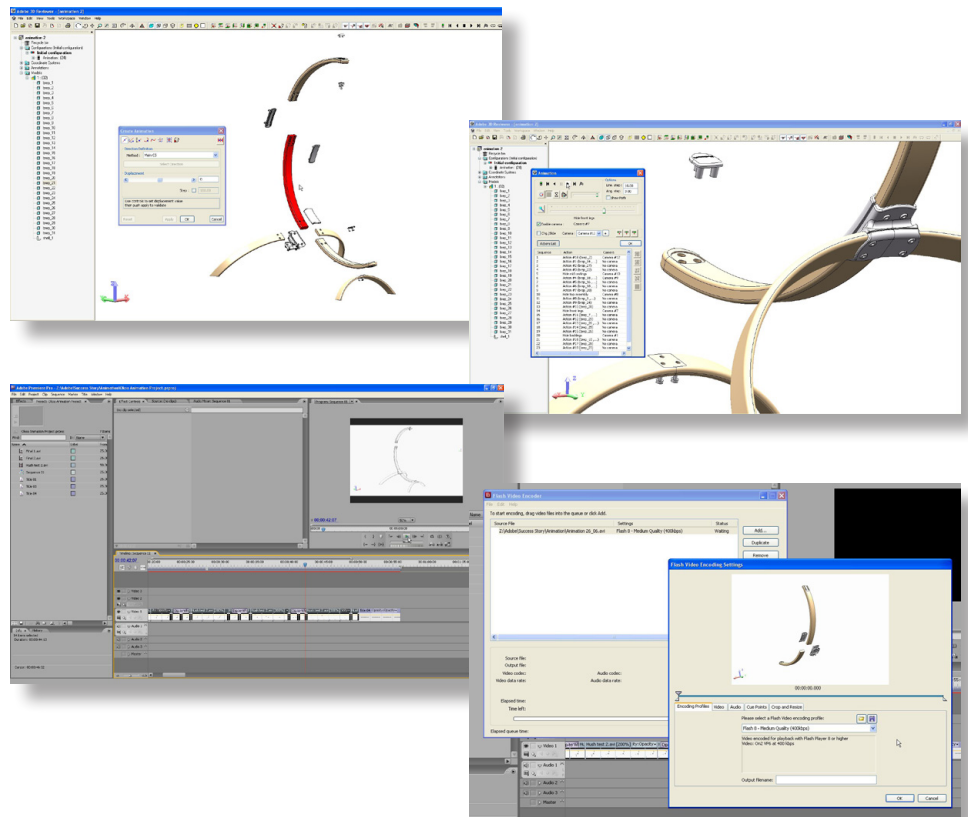
Acrobat 9 Pro Extended helps Designbrand overcome these problems. Designs created in Rhinoceros 3D modeling software can be converted to interactive 3D PDF models, providing clients with a rich, virtual look at their proposed products. "We can save thousands of dollars and literally cut weeks off prototyping and review cycles with Acrobat 9 Pro Extended," says Brand. "The streamlined processes can accelerate product time to market, a priority for our clients."

The rich 3D PDF models enable clients and designers to more securely collaborate in real time, comparing and measuring product elements, rotating models 360 degrees, and viewing material lists included with designs.

Dynamic design assemblies

For Designbrand, the advantages of using Acrobat 9 Pro Extended go beyond collaborating on initial design concepts and prototypes to include final production and creating customer documentation. As highlighted, clients often use the accurate 3D PDF models to communicate manufacturing details to their supply-chain partners.

Designbrand provides clients with dynamic assemblies that enable them to rotate product parts independently for a closer look at how all elements move in relation to each other. 3D PDF files are edited into animations which are exported to Adobe Premiere Pro to create better transitions and add sound. From there, the file is exported to AVI and then converted to a compact FLV file.



At the same time, Designbrand can create and deliver easy-to-use design assemblies in 3D PDF. 3D designs from Rhinoceros can be converted to 3D PDF files and edited into animations. The resulting animations are exported to Adobe Premiere® Pro to create better transitions and then eventually converted back to dynamic 3D PDF files. With the more interactive assemblies, viewers can rotate product parts for a closer look at all elements in relation to each other—and ultimately determine how everything fits together.

“3D support in Acrobat 9 Pro Extended brings tremendous clarity to our communications with everyone that touches a product, from our clients to their manufacturers and customers,” explains Brand. “We can work with 3D PDF files to create assembly animations easily accessible to any audience.”

For More Information

www.adobe.com/products/acrobat/
www.adobe.com/manufacturing/solutions/3d_solutions/desktop/

The assemblies in 3D PDF can also be incorporated into electronic product documentation or posted online for easy access by customers.

Maximizing returns on design

Impacting design collaboration at every stage, Acrobat 9 Pro Extended brings efficiencies to Designbrand to enable the firm to make the most of any client budget.

“In any economy, we focus on giving our clients the most value,” says Brand. “Close collaboration with clients is essential to achieving that goal. With Adobe Acrobat Pro 9 Extended and Adobe Creative Suite solutions, we have the tools on hand to create and communicate product designs at any stage, clarifying design intent and helping ensuring accurate, high-quality results.”



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