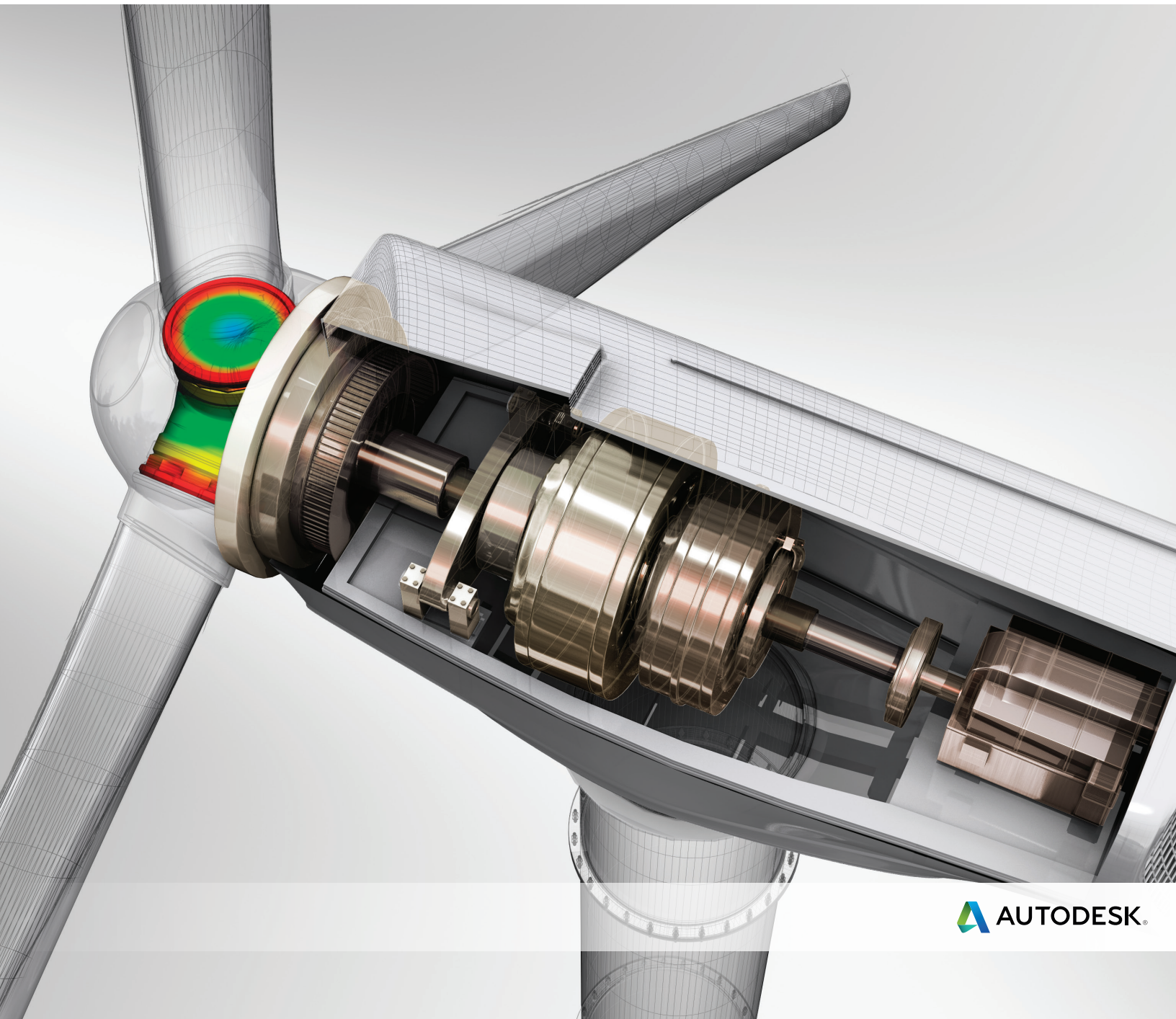# Make great products

AUTODESK.

Autodesk Digital Prototyping lets you explore ideas before you build—and helps streamline the entire product development process

Why Digital Prototyping?

Siloed design tools and inflexible software solutions undermine the ability of conceptual design, engineering, and manufacturing teams to work together to make great products—and get them to market quickly.

The Autodesk solution for Digital Prototyping helps eliminate these product development hurdles by providing an innovative way for you to explore your ideas before they're even built. Digital Prototyping is a solution that is:

- **Open:** Digital Prototyping supports your work across desktop, cloud, and mobile platforms. All software in the Autodesk Digital Prototyping solution works together—as well as with tools you use from other software companies.
- **Scalable:** Digital Prototyping is a solution that grows with you. Scale up or down according to business needs without reworking processes or making large up-front investments in technology.
- **Cost-effective:** Flexible purchasing options like Autodesk® Maintenance Subscription allow you to frontload costs or spread them over time, depending on your needs.

Digital Prototyping enables design and manufacturing workgroups to develop a single digital model that can be used at every stage of the product development and production process. The solution also can be deployed and integrated with minimal disruption to your existing workflows.

What is Digital Prototyping?

Autodesk Digital Prototyping goes beyond simply creating product designs in 3D. It's an intelligent model-based approach to product development that gives professionals across departments the ability to communicate, explore, refine, and implement new ideas in a way that is both compelling and easy to understand.

Digital Prototyping lets you design, visualize, and simulate products rapidly and cost-effectively, so you can grow revenue, spur innovation, and deliver quality products faster:

- Develop more innovative concepts and engineer more accurate digital prototypes
- Perform simulations on digital prototypes to optimize designs
- Validate the real-world performance of product designs to better predict success or failure
- Streamline documentation, data management, and collaboration
- Develop cinematic-quality visualizations to experience products before they're built
- Design, visualize, and simulate your factory layouts
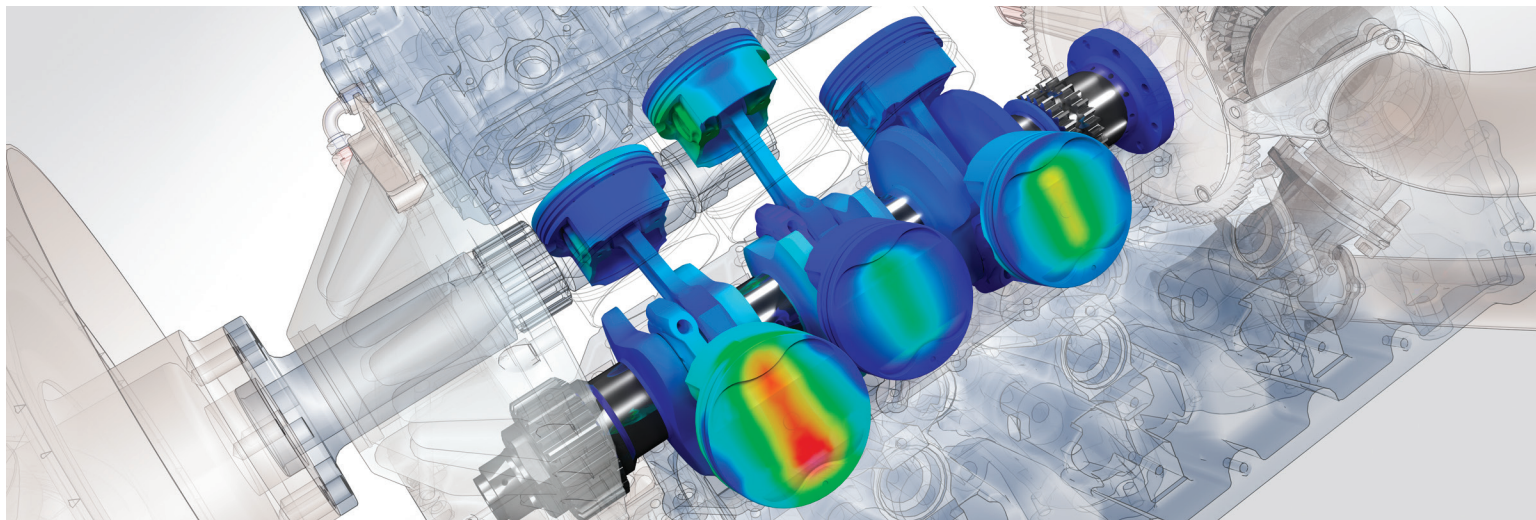- Make better design decisions and avoid costly mistakes

Image courtesy of ADEPT Airmotive (Pty) Ltd.

How Autodesk makes Digital Prototyping work

The Autodesk solution for Digital Prototyping brings together design data from all phases of the product development process into a single digital model—a digital prototype—that you can validate to ensure your product will meet requirements, and reference as you build deliverables for release. Here's a look at how Digital Prototyping can help streamline your product development process from start to finish:

Design and engineering

Autodesk® Product Design Suite software, including Autodesk® Inventor® software, is a comprehensive solution for Digital Prototyping that delivers 3D design, visualization, and simulation tools to help you complete your product development process more efficiently. Autodesk Inventor enables you to develop more accurate 3D models, assemblies, and manufacturing-ready drawings of your products.

Autodesk® Alias® software products provide a complete workflow for automotive designers, technical surfacing professionals, and industrial designers. Accelerate your creative process with industry-leading surfacing capabilities supported by premium best-in-class sketching, modeling, and visualization tools that help you create innovative designs faster than your competition.

Testing and validation

To help validate and optimize designs before manufacturing, you can use a broad range of finite element analysis (FEA) and simulation tools to enhance the Autodesk solution for Digital Prototyping. The Autodesk® Simulation family of products, which includes Autodesk® Simulation Moldflow®, Autodesk® Simulation Mechanical, and Autodesk® Simulation CFD software, lets you integrate mechanical, structural, fluid flow, thermal, composite, and plastic injection molding simulation tools into your product development process to help you reduce costs and speed time to market.

Manufacturing and production

Autodesk® Factory Design Suite includes design, analysis, and presentation software to help you discover and communicate the most efficient layout solution by creating a digital model of your factory. Part of the Autodesk solution for Digital Prototyping, Factory Design Suite offers unique factory-specific functionality in Autodesk® AutoCAD® and Autodesk Inventor software combined with powerful visualization and analysis tools to help improve collaboration and innovation earlier in the design process.

Autodesk® CAM tools bring CAD and CAM together for a truly integrated design-to-manufacturing solution. Whether your design tool of choice is Inventor or SolidWorks®, Autodesk has CAM solutions that allow you to take advantage of a familiar workflow, which means you're up and running faster.

Sales and marketing

Autodesk® 3ds Max® software lets you produce accurate, cinematic-quality visualizations of digital prototypes created in Autodesk Inventor software. Import Inventor data into Autodesk 3ds Max for advanced rendering and animated visualizations of digital prototypes. Autodesk® VRED™ virtual photography software enables industrial designers and marketing professionals to transform their digital data into high-end imagery and animations. Use these stunningly realistic product visualizations for sales and marketing of your products long before building begins.

Collaboration and management

Autodesk data management tools allow design and production workgroups to manage and track all the design components for a digital prototype, helping you better reuse design data, manage the release and change process, and promote early collaboration with manufacturing teams and clients.

Part of the Autodesk solution for Digital Prototyping, the Autodesk® Vault family of data management software helps you keep track of all your digital design data. It securely stores and manages data in a central location, helping teams quickly create, share, and reuse Digital Prototyping information. With Autodesk Vault products, you'll spend less time chasing down files and more time creating innovative designs.

Now is the time

Ready to evolve your design process so you can bring great products to market faster? Purchase or upgrade Autodesk software today and discover how Autodesk Digital Prototyping can help to transform your product development process.

Choose from flexible licensing options, including:

- **Maintenance Subscription:** Maximize your long-term investment in Autodesk software and services with a perpetual license. Always stay current with the latest software releases and get enhanced technical support and flexible licensing rights.
- **Desktop Subscription:** Choose from pay-as-you-go monthly, quarterly, and annual options for using certain Autodesk software.
- **Cloud Service Subscription:** Collaborate in the cloud and access cloud computing power for visualization and simulation. See all free and pay-as-you-go Autodesk® 360 cloud* services.

Comprehensive design suite families from Autodesk are also available, and offer more software for less cost to fit your workflow and budget. Updates, support, and Autodesk 360 cloud services are included with most payment options.

Visit **usa.autodesk.com/digital-prototyping** for more details.

Autodesk Digital Prototyping is an innovative way for you to explore your ideas before they're even built. It's a way for team members to collaborate across disciplines. And it's a way for individuals and companies of all sizes to get great products into market faster than ever before. From concept through design, manufacturing, marketing, and beyond, Autodesk Digital Prototyping streamlines the product development process from start to finish.
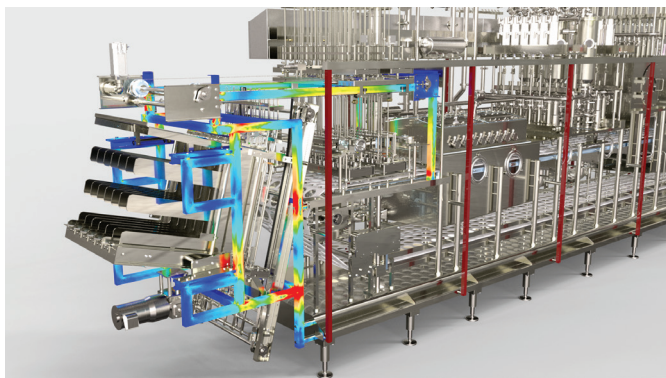

Image courtesy of Osgood Industries

Learn more or purchase

Access specialists worldwide who can provide product expertise, a deep understanding of your industry, and value that extends beyond your software purchase. To take advantage of Autodesk Digital Prototyping, contact an Autodesk Authorized Reseller near you by visiting **www.autodesk.com/reseller.**

Autodesk Education

Autodesk offers students and educators a variety of resources to help ensure students are prepared for successful design careers, including access to free* software, curricula, training materials, and other resources. Anyone can get expert guidance at an Autodesk Authorized Training Center (ATC®) site, and validate skills with Autodesk Certification. Learn more at **www.autodesk.com/education.**

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Autodesk 360

The Autodesk® 360 cloud-based framework provides tools and services to extend design beyond the desktop.† Streamline your workflows, effectively collaborate, and quickly access and share your work anytime, from anywhere. Learn more at **www.autodesk.com/autodesk360.**

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