

Top reasons engineers automate in Inventor

Do you often find yourself spending excess time completing repetitive tasks, modeling standard features, or configuring products to custom specifications? Learn how automation tools inside Inventor help free up your time to focus on projects where you can make the most impact.

1 ELIMINATE THE BUSYWORK

Frequent and repetitive tasks are part of the job, but sometimes they're unique to your design process or products. What if you could easily write code to do all the tedious work for you? Define rules that automate these tasks with iLogic technology inside Inventor. You can even set rules that trigger automatically upon a specified event or action, such as when you're creating or opening a document, changing geometry, or suppressing assembly components.

“ To model an impeller manually took a couple of days previously—with the iLogic program it takes about 15 minutes. If we're modeling hundreds of impellers a year, to create this program was absolutely worth it. ”

- Alex Curtin, Product Manager at FS-Elliott

2 RAPIDLY CONFIGURE PRODUCTS TO CUSTOMER SPEC

Efficiently responding to bids requires a quick turnaround of customer requirements into a properly configured model. iLogic helps you stay on time and on spec. Build the rules to drive a product configurator using the parameters you already captured when creating your 3D model. Then, further improve the communication of your design intent by adding a form. With your knowledge embedded into the design, anyone can easily configure a design to customer requirements, and you get the freedom to invest your time into other projects.

Using iLogic to power a custom stair generator, Viewrail cut design time from **4 hours to 2 minutes** and increased number of monthly orders from **12 to 150**

3 STACK UP TO COMPANY STANDARDS

Checking your work against company standards and best practices is a test of knowledge and time management. You have to know the standards, spot where things don't match up, and find the time to take a close look at your design. By defining standards using automation tools in Inventor, you don't have to do any of this. Instead, Inventor automatically checks your models, assemblies, and drawings. It's easy to ensure compliance before release and confirm that best practices have been followed consistently by all involved. Not only will it save you time, money, and material when you manufacture correctly the first time, but it will also improve the overall quality of your products.

“ If it's an iLogic template, all the parts are in there. Inventor doesn't forget anything so neither will you. You reduce the chance of errors. ”

- Lune Riezebos, Application Specialist in Service Delivery, GEA

4 SKIP THE COMPLEX PROGRAMMING

While there's no shortcut to learning some basic programming techniques, learning the design automation environment saves you both time and headaches. Getting started with iLogic is easy. For instance, commonly used code snippets automatically populate into the rules you define, and a wizard helps quickly create rules for specific tasks. As you get more familiar with the tool, you can tap into more advanced logic. Soon, you'll be creating sophisticated rules using more of the parameters and attributes iLogic can control.

You also have access to specialized tools for sheet metal, weld frame, and plastic part design. Access existing forms with the Content Center to produce commonly used components in your assembly design.

“ Our 3D models are very important to our sales process, and at times they need to be delivered very quickly. We also need to make sure the model is accurate and that it looks good, so we can win more business. iLogic in Inventor helps us do all of this. ”

- Frederik Mussler, Process Engineer and Executive Assistant to the CEO, GARANT-Filter

5 ACCELERATE DESIGN VALIDATION AND MANUFACTURING

Automation isn't limited to configuring your 3D model. In fact, it speeds up downstream workflows all the way from concept to production. While iLogic works with parts, assemblies, and drawings, it also integrates with Inventor CAM to automate toolpath strategies. Automate simulation setup in Inventor Nastran. Ditch the spreadsheets and easily repurpose your existing dimensions and tolerances with Inventor Tolerance Analysis. Then, Inventor Nesting generates multiple sheet metal nest options to reduce material waste and produce comparison reports to review overall efficiency, total cost, and machining time. You can even extract manufacturing instructions automatically from your 3D model.

Specialized tools for automation enabled Technica International to streamline their transition from engineering to manufacturing, reducing time in their overall process from **16 hours to just one**

6 SCALE EFFORTS ACROSS YOUR ORGANIZATION

Once you've implemented automation in your engineering workflows, why not extend the benefits of automation to your entire organization, and your customers too? Accelerate your work process and improve your business flexibility by connecting your business systems to powerful web services. Using the Forge Platform, make your design and engineering data accessible to company colleagues, customers, and suppliers via the cloud.

“ The new Forge-based design tool saves our engineers time on every project. More importantly, customers can complete their own designs online without knowing how to use Inventor. ”

- Kelly Kokesh, Engineering Services Manager, Advanced Drainage Systems

Ready to learn more about how you can begin automating your processes? Visit: datech.pt/produtos-autodesk/product-designmanufacturing-collection/