



**WHITE PAPER**

# Customize and Automate Products: Which Configurator to Choose?

**SOLID**  **PERTS**  
by solidxperience



## The Product Configurator

Today, web-based shopping generates a significant portion of a business's revenue. Offering customized products that meet your customers' specific requirements is essential to stay relevant in a competitive world. With new markets opening up, it is increasingly easy to find multiple suppliers for the same product. So, how do you stand out? How can you quickly offer a product adapted to a specific need? Do you make several different product variations that share a common base? A product configurator is the perfect solution for you.

### But which solution do you choose?

Perhaps a home configurator, used internally, or a "user-friendly" online product? Then, how do you link the chosen product, its options, engineering, ERP system, production, etc.? How can you avoid needing to start from scratch each time? The first step towards choosing the best configurator for your products is understanding the processes between the request (customers - for a product 'X') and its delivery.

Several questions keep coming back: How long does it take to meet the demand? What are the steps involved? What tools are currently being used? Many solutions are available, but two of them are worth remembering: **DriveWorks** and **SOLIDWORKS Sell**. But first, here's how to configure a product with the basic functions of a CAD software.

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## Configure your Products with Basic CAD Software Functions

So, you've acquired **SOLIDWORKS** and want to automate the design creation of certain products. Several options are available to you.

### Using 3D Parameterization:

All 3D software is parametric. Basic models can be created, and their modification is facilitated by specific logic rules. However, to be successful in this approach, you need a designer's discipline, routines, and documented procedures; You become dependent on whoever modeled the product in the software.

Additionally, as time progresses and more changes are made, important details stay in the minds of the designers. The rotation or departure of employees can pose a risk to long-term productivity.

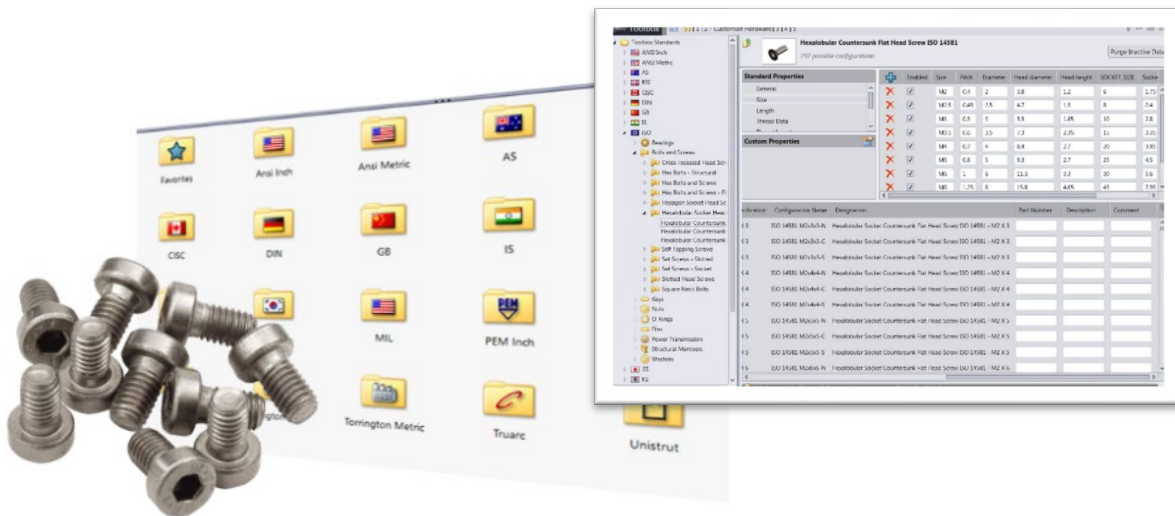


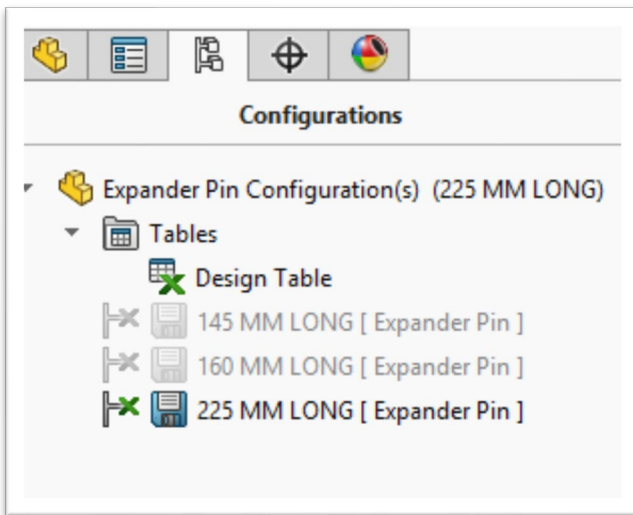
# DISCIPLINE

This method is tedious, and a designer must be meticulous in order to completely parameterize a model and manage its many elements: variables, constants, properties, etc. Therefore, this process is usually used to help the design in part, but not for a complete concept.

We can look at an example of a simple component library with only a few variables to manage.

The **SOLIDWORKS Toolbox** is a good example.





## Using Part Families in **SOLIDWORKS** (Excel):

Another possible solution with **SOLIDWORKS** is Excel spreadsheets, which allow you to configure different products. The full, powerful functionality of Excel is used, but the product is still in **SOLIDWORKS**.

The dependency on the person who mounted this Excel file still exists, and only the designer can configure this product. Caution: the risk of mistakes is great! A single forgotten box can result in a fatal error in production, increasing costs.

In addition, management of the Part Family requires a **SOLIDWORKS** user, and if the goal is to lighten the burden of repetitive engineering tasks, the solutions mentioned above are not more efficient... or at least not enough. Engineers and designers will not decrease their new product development cycle times!

# Configurator in Java or HTML



After having created your products thanks to the parametrization tools, you can display them online, allowing access to your customers.

## Configurators in Java or HTML :

There is software in HTML, Java, or other coding patterns that allows you to publish images and 3D files on a website. However, all configurations of its models must first be produced in **SOLIDWORKS**. If you have less than 200 possible models (depending on your options), this solution is viable. However, if you offer, for example, 20 possible lengths, 20 widths, 100 colors, 10 options with 4 choices each, the figure reaches over 1.5 million possibilities. The solution is therefore not viable. There are simply too many possible combinations. What do you do if you need to make changes to a model? You have to redo the model. One or several people must be constantly available to make changes in **SOLIDWORKS**, and then again in the HTML or Java configurator: it becomes very expensive, very quickly. This solution is only practical for a product with a very limited number of options or configurations.

## Set up your Products with SOLIDWORKS Sell

**SOLIDWORKS** offers you **SOLIDWORKS Sell**, a completely cloud-based interface which allows you to upload your **SOLIDWORKS** models once you have all the models configured in **SOLIDWORKS**. This remains a limited solution based on preconfigured products. This option, however, does not exploit all manufacturing resources.

For example, if new configurations require an updated drawing or CAM process update, **SOLIDWORKS Sell** does not communicate with these resources. That's why the product configurator stands out with more flexibility and possibility from every perspective.

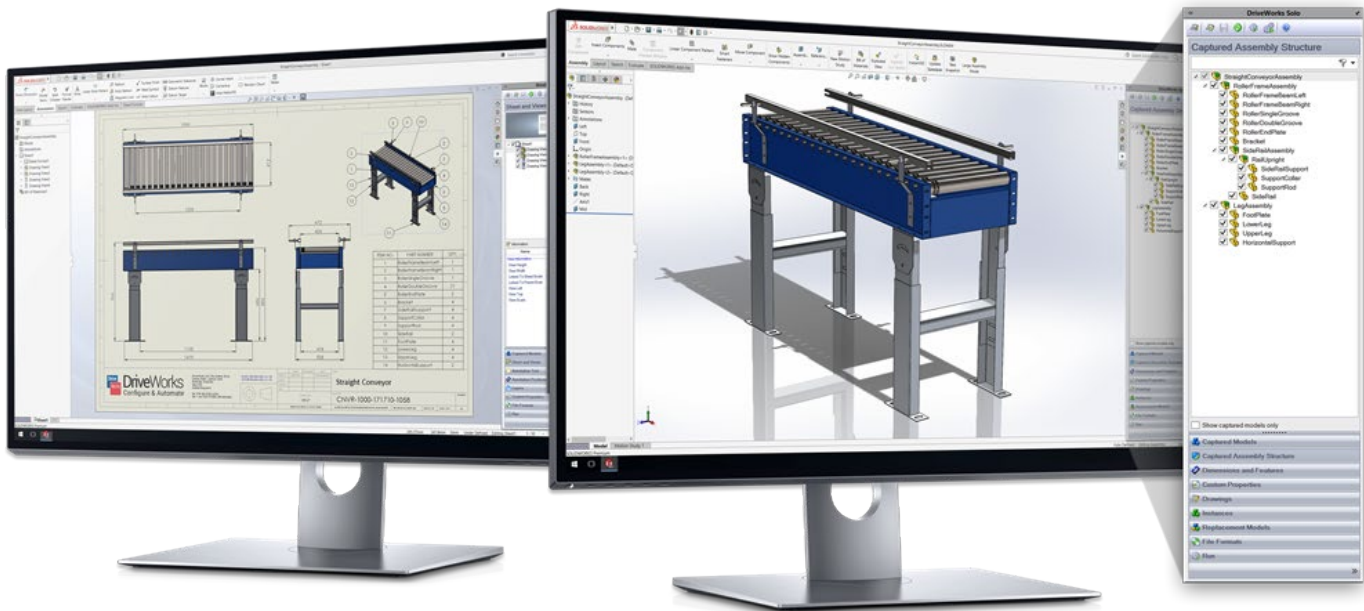




## DriveWorks : Online Product Customization Automation, and More

The ultimate solution for adaptable, customizable, and customer-specific product manufacturers is a product configurator that automates the entire process: **DriveWorks**.

Fully integrated into **SOLIDWORKS**, you capture the intelligence of your product in **DriveWorks**, having built a master model in **SOLIDWORKS**.



All the variables of your product can be captured and managed logically with this add-in (dimensions, additional options, textures, properties, file names, etc.). This software also helps protect your intellectual property as data will now be saved inside your **DriveWorks** solution.



**Basic Trailer**

Basic trailer chassis, ready for your own customisations.



**Flatbed Trailer**

Carry large bulk loads with ease. Flatbed trailers are easy to load and unload from any side.



**Curtain Sided Trailer**

Carry large bulky loads with the added protection of curtain sides. Our most popular choice.



**Rigid Box Trailer**

Protect your cargo and minimise damage with a rigid box trailer.

Automate not only the 3D models, but also the drawing dimensions, the proposals related to a price list, nomenclature exported in an ERP system, and much more. This solution not only automates the creation of the model, but all the information needed for your production line. The customer can choose their model options, get an updated 3D model, and the price of the product. You will then get the production drawings, or the list of needed parts for manufacturing, for your ERP system with integration in your PDM. Take integration one step further with **DriveWorks Pro** advanced options.



Internal **DriveWorks** configurator solutions can be used to help engineering departments respond more quickly to sales requests. These solutions also open the opportunity to add the configurator to your website, so your customers can configure the products according to their preferences. In exchange you get all the information to reduce costs and manufacturing time.



At **SolidXperts** we have a team dedicated to **DriveWorks** and we can help you set up your automated projects. We offer software, training, full technical support, and we have a team of **Xperts** to help you carry out your project from A to Z. Contact us to find out everything you can do with **DriveWorks**.

## SETUP



### ADMINISTRATOR

Set up and manage your configurator project. **DriveWorks Administrator** can be used with or without 3D CAD.

## CONFIGURE



### LIVE and/or USER

Enter order specific requirements using **DriveWorks Live** in a Web browser or **DriveWorks User** locally.

## AUTOMATE



### AUTOPILOT

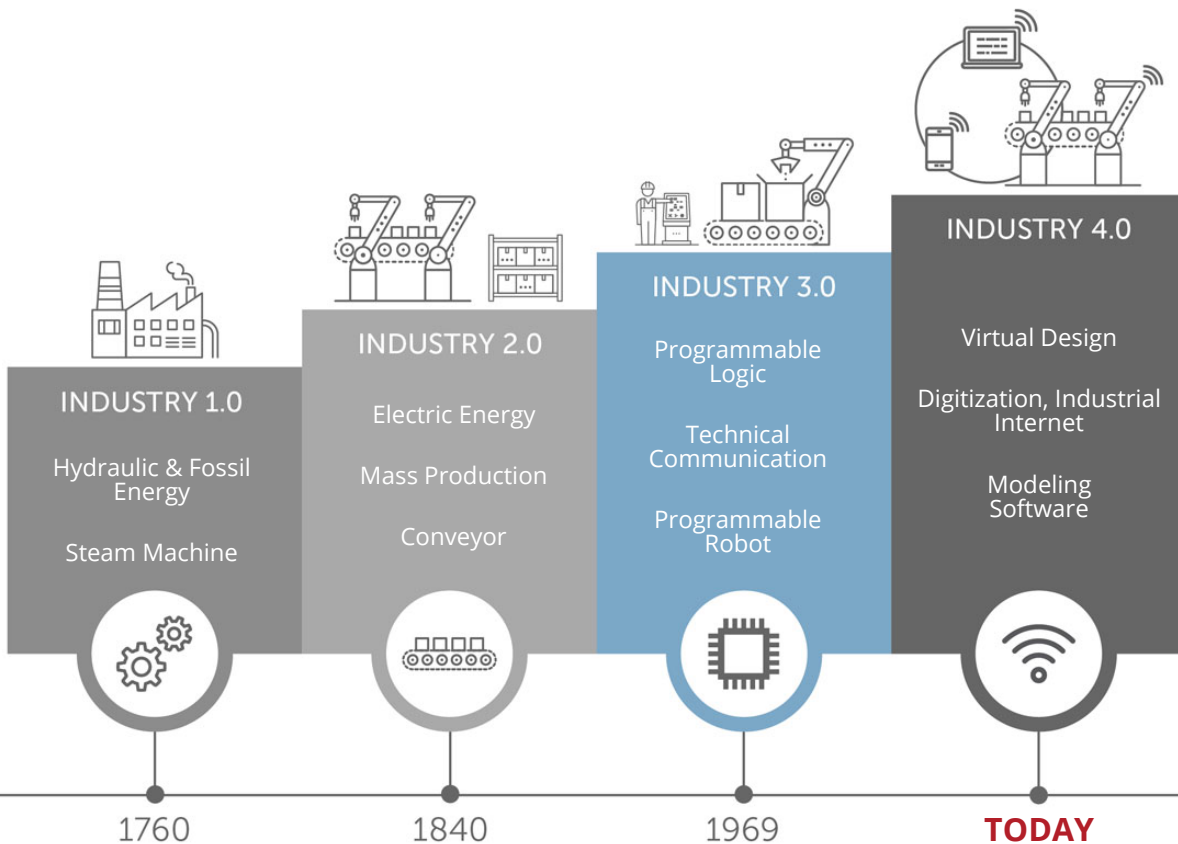
Generate files outputs and send emails using **DriveWorks Autopilot**.

## RESULTS



**DriveWorks** can be used to create all of the manufacturing files and sales documents automatically.

# Let us help you move into a new era of customization and automation!





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