

**Product Configuration Management** 

# Infor 3D Design Automation

# **Key Benefits**

Using 3D Design Automation with the Product Configurator, you can:

Accelerate delivery of customized product orders by eliminating engineering steps from lead time.

Reduce engineering costs by automating creation of detail drawings and manufacturing information.

Provide value-added sales deliverables that might otherwise be too costly to produce.

Streamline production and help ensure quality by providing configuration-specific drawings and information to manufacturing.

Speed new product development by leveraging modular product family models.

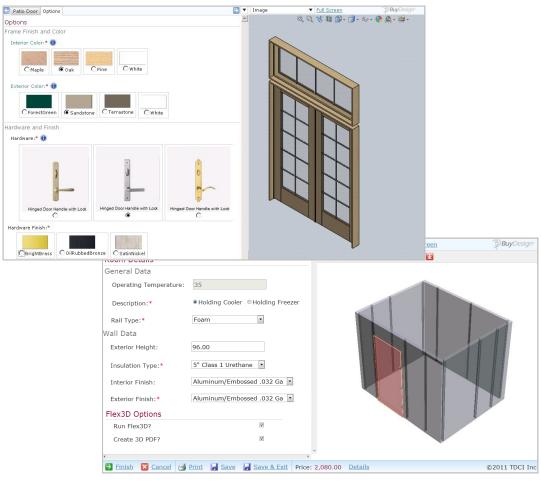
Leverage existing CAD tools and skills.

## CAD Automation for dynamic 3D models, and more

Infor 3D Design Automation accelerates the design and delivery of configured products while reducing cost and freeing valuable engineering time. It fully leverages the power of 3D CAD technology to automate the generation of configuration-specific detailed 3D models, drawings, and manufacturing information for individual customer orders.

3D Design Automation works with the Product Configurator and 3D CAD systems to dynamically generate configuration-specific 3D models based on user-specified features, options, and dimensions. The Product Configurator and 3D Design Automation dynamically resolve 3D CAD model templates containing assembly and part templates, parametric relationships, and geometric constraints at runtime to generate CAD outputs, as well as detail drawings and manufacturing information.

3D Design Automation can also read a CAD model assembly structure to identify the components in a product's BOM. Using this capability can reduce model creation and maintenance work by eliminating the need to maintain BOM rules within the model when 3D CAD is utilized.



Use the Product Configurator to flex parametric 3D CAD models

#### The Product

The Infor Product Configuration Management solution enables manufacturers to streamline the selling and production of their configured products. Our solution helps customers create compelling quotes, accurate orders, and complete bills of materials and routings; driving revenues, reducing costs and differentiating their brands in the marketplace.



# Rapid Creation of As-Engineered Product Definitions

3D Design Automation dramatically reduces the time and cost required to produce configuration-specific product definitions at an *as-engineered* level of detail and accuracy suitable for use by engineering, sales and manufacturing. It replaces time-consuming and tedious manual CAD operator activity with automatic generation of:

- High level models and quote drawings to support product visualization and customer collaboration during the configuration and sales process
- Specification drawings and CAD files (e.g. DXF, IGS, STP files) for delivery to the customer once the order is placed
- Shop drawings such as detail, section, quality and inspection drawings at the assembly, subassembly, and component level for use by manufacturing
- Detailed assembly models for use by engineers for further engineering analysis or to generate CNC instructions for numerically controlled equipment

### Innovative Design Methodology

Using the 3D Design Automation design methodology, designers leverage the Product Configurator rules along with their existing 3D CAD system to develop product family models. These models are then used as templates for the automatic generation of configuration-specific product designs. In addition to supporting the automatic generation process, this approach speeds the design process. It produces product family models that are faster and less expensive to develop and maintain than traditional 3D models developed using the CAD system alone.

- A 'design for customization' approach establishes the guidelines and standards to create product family models that provide maximum flexibility and ease of configuration
- A design reference database enables the use of highly modular 3D models that combine to represent the complete product family by mapping input variables to the various sub-models, their attributes, and their location, position, and orientation within the completed product
- A testing application provides the tools for designers to easily exercise and verify product family models before releasing them for use in the automated generation process

