

**Product Configuration Management** 

# Infor 2D Design Automation

# **Key Benefits**

Using 2D Design Automation with the Product Configurator, you can:

Reduce order errors by providing dimensionally accurate visual confirmation of product configurations.

**Reduce engineering resource costs** by automating creation of drawings and CAD files.

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

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

Simplify product models by utilizing a powerful geometric engine for complex calculations.

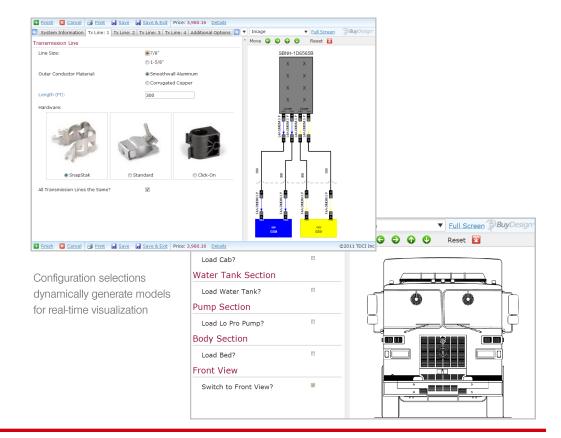
## CAD Automation for dynamic 2D models and drawings

Infor 2D Design Automation reduces order errors by providing real-time visual feedback of selected options. It also eliminates non-value-added time by generating configuration-specific outputs for use by sales and manufacturing.

2D Design Automation is a powerful geometry engine that works with the Product Configurator to dynamically generate dimensionally accurate 2D visuals. Outputs are produced in a variety of raster (e.g. JPG, GIF) and vector (e.g. SVG, EMF) formats that are used as:

- 2D Model Images displayed during the configuration process and in the Sales Portal quote screens.
- **2D Print Images** used in printed documents such as bids, proposals, product brochures, and reports.
- Annotated Drawings that are used in submittals or as sales drawings.
- AutoCAD and CAD Files for inclusion by engineers and designers in their own CAD drawings.

2D Design Automation can even create complex multi-unit combination products, e.g. mulled (combination) window units or HVAC systems with multiple elements. All outputs are dynamically generated by the 2D Design Automation geometry engine without the need for any third party CAD product at execution time.



#### 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.



# Visualization, output generation & complex dimensional calculations

As a product visualization tool, 2D Design Automation provides immediate confirmation that a configured product looks exactly the way the customer wants it to look. It can be run:

- Interactively as an integral part of the configuration process
- After all configuration selections are made

**As a drawing output generator,** 2D Design Automation can be run after the configuration process is complete to generate the other 2D output files for use in bid, proposal, or submittal documents and other deliverables.

 Generated drawings can be viewed or edited using a variety of image handling programs

As a complex dimensional calculator, the 2D Design Automation geometry engine can be queried for values it calculates based upon inputs from the configurator. Key driving dimensions are passed to the geometry engine which resolves the constraints and dimensional relationships to calculate the values of derived dimensions. The configurator can then use those values in the configuration session. This capability can be used to:

- Keep complex engineering logic or math external to configuration rules
- Reduce errors in computation by using a robust geometry engine to do the math
- Improve performance by using powerful mathematical solvers built into the geometry engine

## Develop models with popular CAD tools

Parametric 2D Design Automation template models used by the geometry engine are created with the 2D sketching capabilities of popular CAD systems enhanced with a Flex2D plug-in. Using this innovative approach, existing drawings can often be turned into "smart" 2D models in a matter of hours.

The resulting models enable 2D Design Automation to automatically resolve constraints and dimensional relationships between geometric elements and perform complex calculations necessary during configuration to generate the images dynamically. This results in:

- Reduced model design time
- Easy maintenance of complex logic in visual templates
- Optimal run-time performance

