

NEW in ShipConstructor® 2009 R1

FEATURES

Drawing Viewports Options – This feature allows a designer to control the ShipConstructor drawing options in a production drawing *per viewport*. As an example, in one viewport piping systems can be displayed in 2D line mode, while the same objects are displayed in 3D Hidden Line mode in a second viewport in the same drawing. With the additional control this ability provides it is even easier to automatically create the desired production output.

NavisWorks file creation – This feature represents a significant improvement in the creation of NavisWorks models. With only a few mouse clicks, a designer can create a detailed virtual reality model from any portion of the 3D product model. Numerous custom visualization options which control the overall creation process are available and can be set depending on the intended use of the NavisWorks model. Due to the ease with which these VR models can be created, complete with attribute data from the product model, every designer using ShipConstructor now has an invaluable tool which fosters a greater understanding of the overall design. In addition, ShipConstructor remembers the sources selected during the creation process, allowing the virtual reality models to be updated when the product model changes.

Updatable Curved Plates – With this functionality designers can update Curved Plates, both the surface and expanded geometry, when changes happen to the surface from which they were created.

Distributed System Hangers & Supports – This module offers parametric design capability of pipe hangers and supports based on a broad range of industry standards. Each support is associated with a set of pipes and pipe hangers as well as foundational structure, allowing the support to be constrained by, and automatically adapt to, design changes as the project progresses. The ability to automatically

generate support fabrication drawings, linked to the model using ShipConstructor's Associative DWG technology, provides a smooth transition from engineering to production.

Standard Assemblies – This feature allows for the standardization of commonly used assemblies, including items such as simple panels, ladders, equipment complete with standard foundations, pipe manifolds, and handrails etc.

Property Harvester – The first stage of the Property Harvester, included in ShipConstructor 2009, adds the ability to quickly annotate a specific property (stock, material, thickness, identifier etc...) of a part in the product model or a production drawing. If the property of the part which is shown in the annotation is changed, either due to a change to the 3D model or to the underlying stock libraries, the annotation will automatically update.

Space Allocations – This latest version of ShipConstructor provides an intuitive set of tools that allow for the allocation of space for required systems and components well before they are modeled. The allocated space is parametrically associated with wireways in the upcoming ShipConstructor Electrical module. Changes to the allocated space will be automatically propagated to the detailed electrical system model, providing a bridge between the earlier stages of the design process and the final production design.

Dihedral Angle – This function allows the designer to easily mark the angle between any two planar parts. The marked angle is used to ensure accurate alignment of the parts during production.

Offset Construction Lines – This feature enhances the existing associative and parametric modeling capabilities in ShipConstructor. Designers can now create offset relationships between construction lines in the 3D model. Like all relationships in the ShipConstructor model these new relationships are associative.

IMPROVEMENTS

Nest Optimizer – ShipConstructor Automatic Nesting has been improved with the addition of an optimization engine. The optimizer can increase material utilization and decrease nest scrap, which translates into direct savings in production.

Improved Export Options – New options are available to allow better control when exporting a ShipConstructor drawing to plain AutoCAD. This makes the process of creating deliverables less time consuming.

Revisions – A vast array of new revisions will be recorded when changes to standards and parts are made. The increased amount of information provided, allows for improved change management and quality control procedures to be implemented when changes occur.

Weld Module Performance – The amount of time taken to generate welds for an assembly in the Product Hierarchy has been reduced.

PS&M – The amount of time and workstation resources required during the Project Split & Merge process has been reduced.

Stiffener contact path – This feature adds the ability to only mark the contact path of profiles when stiffener marking is added to plates as opposed to marking the entire length of the stiffener. This helps to ensure correct fit-up in production.

Modification of Penetration Paths – This functionality allows a designer to modify the automatically generated toolpath of a penetration as needed. This ensures that the required toolpath for non-standard or complex penetrations can still be included at the engineering phase.