

ASSEMBLY PLANNING SOLUTIONS

Fast and Easy-to-Deploy Planning Solution for Assembly Process Simulation and Documentation

Overview

DELMIA ASSEMBLY PROCESS SIMULATION is a powerful 3D planning and simulation tool designed to optimize both the product engineering and the assembly manufacturing processes. Users can define, simulate, and review the entire process, allowing users to identify potential design issues that can be documented and communicated to the appropriate engineering teams. Users can also reuse their process data and lessons learned downstream for operation and maintenance task by creating assembly procedures for product assembly, disassembly and services.

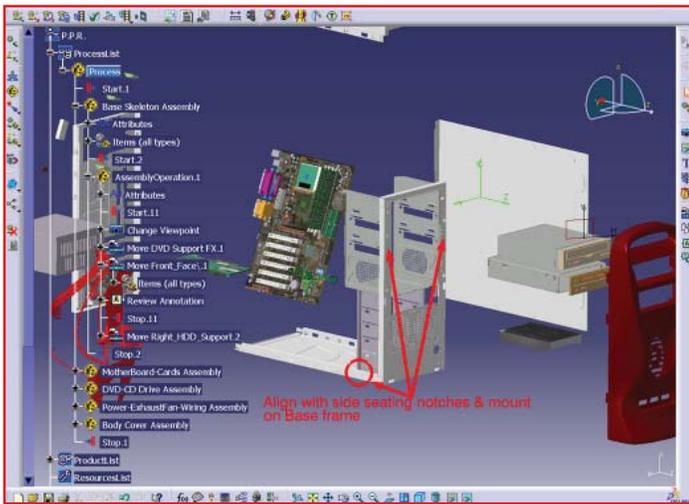
DELMIA ASSEMBLY PROCESS SIMULATION provides a detailed view of each step in assembly and a high-level process hierarchy describing the final assembly process. Users can quickly verify processes by viewing geometry and process information, including annotated views and simulation playback. They can interrogate attributes within the geometry and perform basic geometric analysis, thereby resolving possible conflicts in a virtual environment before physical deployment.

DELMIA ASSEMBLY PROCESS SIMULATION works directly from existing CAD data to author process plans and documentation with simulation detail for products with the ability to add appropriate resources in the workcell with human operators. This allows greater integration between product and manufacturing processes for clear associativity between product, process, resource, and documentation.

In addition, DELMIA ASSEMBLY PROCESS SIMULATION allows users to link all product, process, and resource data within a single assembly simulation file. This provides instant access to analyze, capture and reuse all product, process, and resource know-how within the assembly processes model

Create product assembly simulation to analyze the impact on the factory floor. DELMIA ASSEMBLY PROCESS SIMULATION provide tools to create assembly simulations to focus specifically on interferences that parts may encounter while moving through a facility. This enables the user to spatially validate how product will flow through a factory with an emphasis on collision detection. Users may use static or predefined kinematic products and resources in the simulations.

DELMIA ASSEMBLY PROCESS SIMULATION's part-motion trajectory generation features allows the user to position a part in the desired start and end locations, which is then automatically "captured" for simulation playback. Both simple and complex part motions can be reproduced in the simulation exactly as defined in the original motion. DELMIA ASSEMBLY PROCESS SIMULATION's simple graphical programming interface allows the user to specify sequences in a graphical PERT chart for all parts qualify logical build-up of assembly for the final product. The interface also enables task synchronization between product assemblies, tooling, and other factory resources.



View and communicate assembly process know-how

Simplified 3D process viewer allows users to quickly and easily verify their processes by reviewing geometry and process information, including annotated views and simulation playback using a simple VCR-like interface. 2D Annotation can be added to simulations to allow users to notate and highlight specific areas of concern. DELMIA ASSEMBLY PROCESS SIMULATION also enables engineers to deliver process documents in various formats such as AVIs, XML, HTML, and other standard formats.

Provide accurate maintenance and training documentation

DELMIA ASSEMBLY PROCESS SIMULATION enables engineers to generate process documents that can be used as electronic work instruction, 3D-based shop aids and other downstream engineering or manufacturing activities. Users can customize document output in 3D XML or Microsoft Office® documents that will allow them to manipulate their view of the assembly process from within the document. In addition to improving communication with your shop floor technicians this capability enhances communications with outsource manufacturing operations. This provides a more effective way to explain and share work instructions and reduce time and money spent on site visits and training for workers to effectively complete their part of the process.

Key Highlights

- Create assembly simulations with CATIA or other 3D CAD geometry
- Create sequential assembly operation stations representing process flow
- Link, manage, and save all your product, process and resource data within a single assembly simulation file
- Create step-by-step assembly process documentation in 3DXML or standard Microsoft® Excel documents
- Specify assembly sequences in a PERT chart for each part
- Initial process creation can be automated by using Visual Basic scripting
- Perform assembly sequence analysis
- Review the entire assembly process simulation using simple VCR-like interface
- Communicate and document changes, design issues, and assembly procedures for product assembly and disassembly operations

Benefits

- Fast and easy-to-use
- Reduce errors by performing assembly process analysis early in design cycle
- Facilitate assembly process modeling and pre-planning
- Visualize manufacturing and assembly procedures for maintainability, supportability, and training
- Save time by analyzing multiple assembly scenarios quickly to determine the optimal process

For more information on DELMIA, visit our website at www.delmia.com

About Dassault Systèmes:

As a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 100,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire lifecycle of products from conception to maintenance to recycling. The Dassault Systèmes portfolio consists of CATIA for designing the virtual product - SolidWorks for 3D mechanical design - DELMIA for virtual production - SIMULIA for virtual testing - ENOVIA for global collaborative lifecycle management, and 3DVIA for online 3D lifelike experiences. Dassault Systèmes is listed on the Nasdaq (DASTY) and Euronext Paris (#13065, DSY.PA) stock exchanges. For more information, visit <http://www.3ds.com>

DELMIA is a registered trademarks of Dassault Systèmes or its subsidiaries in the US and/or other countries.

