

Assembly Process Planning solution

A collaborative solution for planning manufacturing assembly processes

fact sheet

www.ugs.com

► Summary

Success in today's global marketplace requires as much innovation in your manufacturing operations as it does in the products you bring to market. The strategy to "plan anywhere, build anywhere" requires technologies and methodologies that allow manufacturers to efficiently author, simulate and manage manufacturing information throughout their organization and with each other. Assembly Process Planning addresses "how" a product has to be manufactured with a relational model linking product design systems that address "what" has to be manufactured. A collaborative environment allows integration with shop floor execution systems that address "when" and "where".

Features

UGS' common product and manufacturing (process, resource, plant) data management system enables users to track the entire manufacturing information lifecycle

The Tecnomatix™ digital manufacturing solution provides a complete set of interoperable tools employing an interactive 3D graphic environment

Tools include:

- Resource management
- Effectivity and change management
- Workflow
- Time estimation
- Pert and gantt charts
- Line layout

Generates process plans based on templates of existing plans

Provides collaborative environment for enhanced communication between team members

Provides internet-based reporting and visualization of manufacturing information

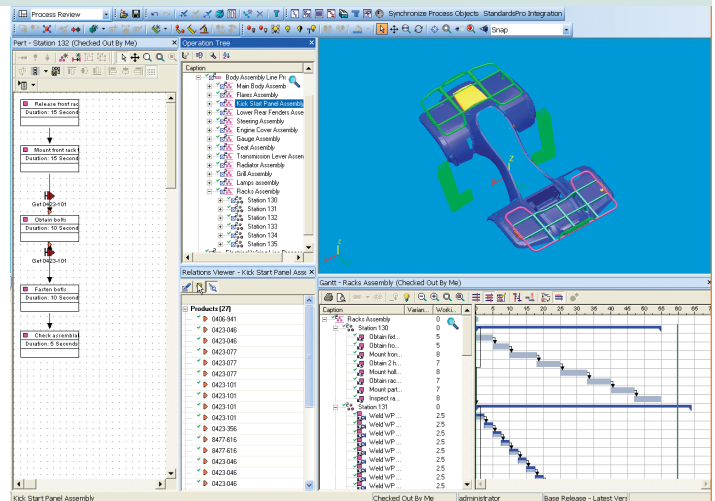
Open architecture allows user development of planning and engineering applications as well as integration with legacy engineering applications and IT systems

The business value of Assembly Process Planning

Competitive pressures have significantly shortened production cycles. The need to get innovative products to market faster is driving manufacturers to distribute production over many, often geographically disperse, plants and contract manufacturers. Time-to-market and time-to-volume have become much more critical success

factors in today's environment. Software solutions that allow manufacturers to leverage and optimize existing resources and to better integrate the manufacturing process from beginning to end can help manufacturers create products faster. They can also begin production earlier in the overall cycle or even start later in order to accommodate unanticipated changes.

Assembly Process Planning supports the manufacturing process lifecycle from process planning and detailed engineering to full production. Connecting all members of the manufacturing chain from OEM designers, engineering and manufacturing, to plants and suppliers into one virtual enterprise, the Assembly Process Planning solution helps manufacturers build the best production strategies to support their business strategy. It allows manufacturers to evaluate alternatives, coordinate resources, optimize throughput, plan for multiple variants, implement changes and estimate costs and cycle times from the very early stages of concept planning through production.



Benefits

Reduces manufacturing assembly planning efforts and duration by:

- Increasing process quality, commonality and consistency
- Improving collaboration through all levels of the organization
- Reducing cost of change
- Ensuring overall product and process quality, which can then be applied to future programs using captured knowledge

System requirements

Teamcenter:

- Windows Intel (32-bit) XP SP1, 2000- SP3
- Hewlett Packard HP-UX 11.0, HP-UX 11.11
- IBM AIX 5.1, AIX 5.2
- Sun Solaris 8, Solaris 9

Process Planning Apps:

- Windows 2000 and XP

The Assembly Process Planning advantage

Assembly Process Planning is the most complete set of process planning applications – and the only integrated data management application – which manages the entire lifecycle of product and manufacturing data together. This allows users to completely define the manufacturing processes and manage the lifecycle of those processes along with the product. Advantages include:

- Information is always current
- Enables capture and re-use of manufacturing processes
- Manufacturing has recent changes and configurations from product design to ensure accurate process development
- Sound foundation benefits future digital manufacturing solutions
- All reports, work instructions and documentation is generated from the plan, and kept current with the plan.

Using the Assembly Process Planning solution

The Assembly Process Planning solution provides a collaborative environment for planning manufacturing processes. At the foundation of the solution is the Teamcenter-based manufacturing backbone. Geared toward extending a product-focused PDM environment to manufacturing data, the manufacturing backbone enables users to manage the processes of manufacturing product assemblies, machining individual components, laying out the facility in which the process will be executed and deploying the resources used by the processes. The Assembly Process Planning solution provides a broad range of applications that enable you to define and verify product assembly sequences; create assembly-line layouts; allocate the required time for each operation; and analyze product and production costs. The result is an electronic process plan. Containing a full description of the processes by which a product is assembled, manufactured, tested for quality and packed for shipping, this process plan is the basis for information accessibility between central planning departments, plants and contractors.

Expanding the opportunities

The Assembly Process Planning solution contains the foundation for implementing the complete suite of integrated tools ranging from factory modeling through production management. These tools and applications can be added to the package when evaluating the needs of your organization and can include:

- Plant performance applications for design, simulation and validation of the virtual plant
- Human performance applications for simulation and validation of the human aspect of manufacturing
- Mechanical simulation for overall process validation
- Integrated publishing tool to configure, manage and distribute all manufacturing documents
- Detailed process applications for balancing manufacturing lines, costing analysis, time analysis
- Integrations to third party IT applications

Contact your sales representative for a complete and up to date list of available products.

▶ Contact UGS

Americas 800 498 5351
Europe 44 1276 705170
Asia-Pacific 852 2230 3333

www.ugs.com

