

eM-Planner – eMPower for manufacturing process management

Planning, analyzing and managing manufacturing processes throughout the enterprise

fact sheet

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► Summary

eM-Planner enables you and your colleagues across the enterprise to collaboratively plan and manage manufacturing processes for entire plants, lines and single operations. Using object-oriented technology, corporate libraries of resources and operations, manufacturing best practices and proven experience, you can create optimal processes and accommodate multiple product variations quicker and faster than ever before. eM-Planner allows you to evaluate manufacturing alternatives, coordinate resources, optimize throughput, plan for multiple variants, implement changes and estimate costs and cycle times – all in the very early stages of concept planning.

Features:

Modeling of manufacturing processes and lines using a complete set of interoperable tools

Analysis and management of operations, resources, variants and changes

Internet-based reporting and visualization of manufacturing information

Integration with engineering applications and IT systems

Open application programming interface (API) for user-development of planning and engineering applications

Planning a manufacturing process

eM-Planner provides a collaborative environment for planning manufacturing processes. A broad range of applications enable you to define and verify product assembly sequences; create assembly-line layouts; allocate the required time for each operation; verify line performance, including throughput, resource utilization and bottlenecks; perform line balancing; and analyze product and production costs.



The result is an electronic bill of processes (eBOP). Containing a full description of the processes by which a product is assembled, manufactured, tested for quality and packed for shipping, the eBOP is the basic token of information exchangeable between central planning departments, plants and contractors.

eBOPs are stored on the eMServer, which serves as the basic collaboration infrastructure for information creators. The eMServer stores manufacturing processes including eBOPs, reports, analysis and work instructions, and enables access, exchange and interaction across the global enterprise. An integral part of the corporate IT environment, the eMServer integrates with PDM, ERP and other legacy systems, and provides the link that enables the free flow of information from planning and engineering to manufacturing operations.

Delivering reports and work instructions

The eM-Planner generates a wide variety of reports including process sheets, resource compilations, line zones and station utilization. Reporting tools enable you to run fast and customizable queries from the process database. You can create various types of process documentation, including electronic work instructions, bills of materials and management reviews and distribute them to your colleagues over the web.

You can also view reports in the MS Office environment for further design, processing and modification.

Benefits:

Define product assembly sequences, create a simulation and verify manufacturability and serviceability of products

Plan workplace and facility layouts and allocate their resources in a 2D sketcher environment. Drawings of the manufacturing area are delivered in various formats

Define and manage the cycle time of a single operation or a set of operations. The time value is defined using either operations libraries that include predefined time values or by using the integrated MTM timetables

Analyze performance, throughput, bottlenecks and cycle times using discrete event simulation. The results can be stored in the process database for future use

Balance lines using the Gantt chart that displays the workload assigned to each resource. The chart allows identification of critical paths in the production line, taking into account product variation mix, process constraints such as direction and sequence of assembly and availability of resources

Estimate costs of the line based on cost of resources and consumables

eM-Planner management

eM-Planner management capabilities include:

- *Manufacturing feature management* – enables distribution and management of manufacturing features including machining, gluing and seams, as well as welding, screwing and measurement points
- *Variant management* – enables modeling and management of variants including product, resources and processes
- *Change management* – enables implementation, control and management of data changes made in eM-Planner as well as in other systems, including ERP and PDM systems

eMPower solutions for MPM

The UGS Tecnomatix™

eMPower suite is an end-to-end collaborative solution that enables the planning, design, analysis, optimization and operation of manufacturing processes – letting users create and share manufacturing information across the enterprise and throughout the supply chain.

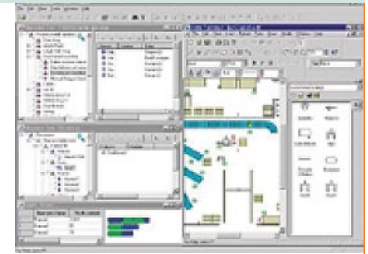
eMPower solutions help manufacturers implement effective MPM strategies – from sharing product and process designs, to joint process planning and engineering by teams in distributed locations – helping planners to make decisions such as where, how and with what resources to manufacture products.

Leading manufacturers around the world are adopting Tecnomatix eMPower solutions to expand revenue potential by reducing costs, accelerating product introductions, shortening time to volume, and optimizing production execution.

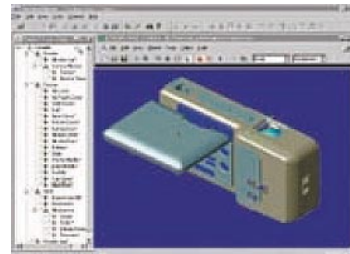
For more information about UGS Tecnomatix solutions, visit www.ugs.com.



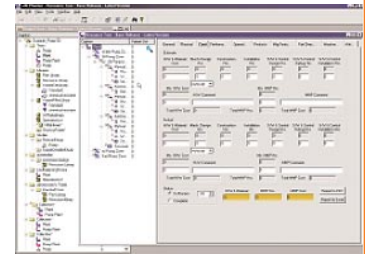
Estimate operation times



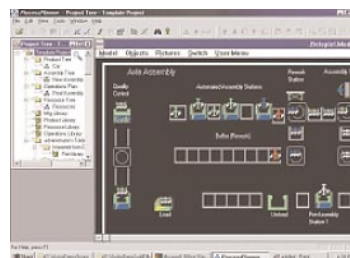
Plan workplace layouts



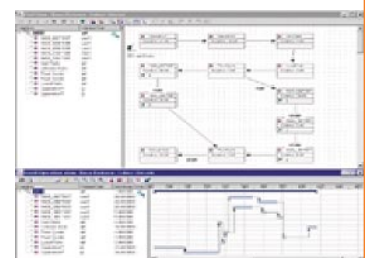
Define product assembly sequences



Estimate costs



Analyze performance



Balance lines

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