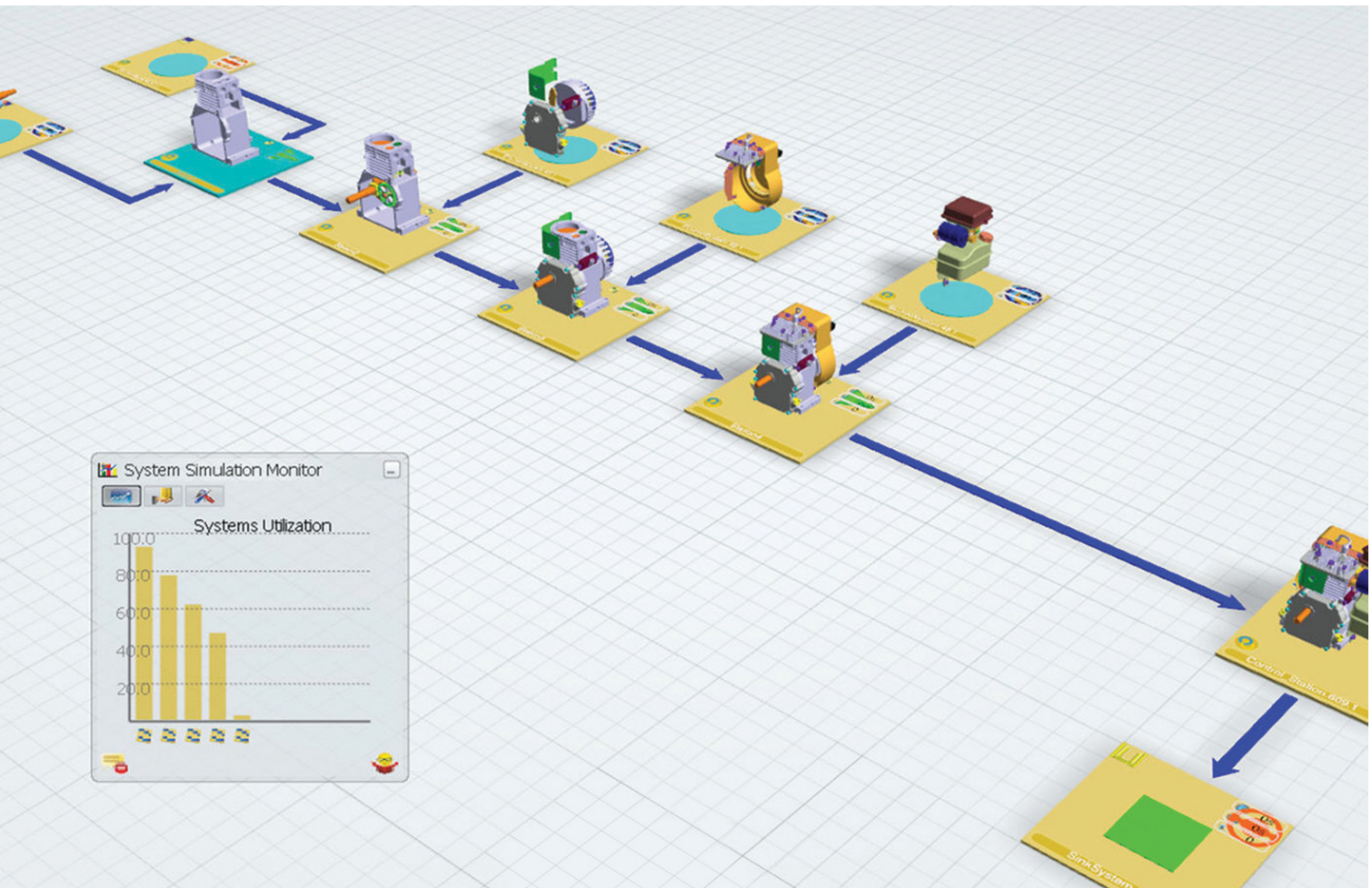


PRODUCTION SYSTEMS SIMULATION

Datasheet



DEFINE AND SIMULATE MANUFACTURING SYSTEMS:

DELMIA PRODUCTION SYSTEM SIMULATION PROVIDES A 3D ENVIRONMENT TO QUICKLY BUILD A VIRTUAL MODEL OF THE MANUFACTURING SYSTEM, WHICH IS THEN USED TO EXECUTE THE MANUFACTURING PROCESS PLAN.

DELMIA Production System Simulation (PSS) enables dynamic evaluation and improvement of manufacturing system and material flow. Modeling and simulating the system over multiple cycles helps with decision making in uncertain conditions.

Using the established process plan, the planner defines the manufacturing system, which consists of areas for processing, storing, and transferring parts. The flow of parts can be defined from area to area. Once the system is defined, it can be simulated to evaluate its capacity, utilization, and other performance measures. The planner can then evaluate alternative scenarios for product routing and system design.

SIMULATE THE MANUFACTURING SYSTEM

DELMIA Production System Simulation allows the process planner to validate the manufacturing system dynamically. Product flow and operation

time, as well as scheduled maintenance and random equipment failure events, are simulated to help the planner understand how they will impact the system's capacity. Process planners can determine if changes to the system are needed to achieve the desired production demands.

VIEW THE CURRENT STATE OF A SYSTEM DURING SIMULATION PREVIEW

During simulation, 3D animation of products and an iconic display of the system make it easy to understand the state of the manufacturing system. The planner can view, in chart form, the number of products, waiting and operating times, time spent in various states, and utilization.

DETECT BOTTLENECKS

Discrete event simulation is an important decision support tool to evaluate changes in manufacturing, distribution or process facilities. The challenge arises when it comes to the integration of simulation as an effective tool to detect manufacturing constraints and to suggest improvement alternatives. DELMIA Production System Simulation makes it easy to understand the behavior of the system and to identify bottlenecks.

ANALYZE PERFORMANCE STATISTICS AND GENERATE AND PUBLISH REPORTS

Users of DELMIA Production System Simulation are able to define and validate the manufacturing system with simulation. Specific performance aspects of the system, such as throughput, utilization, and work in process are measured and reported. Users can experiment with system parameters and layouts to determine optimal design and operating conditions.

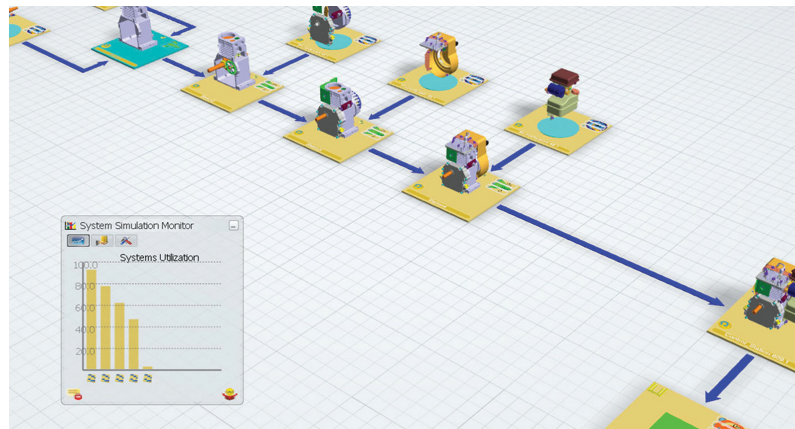
PRODUCT HIGHLIGHTS

- Define production system boundaries
- Specify product routing rules, buffer capacities and transfer times
- Define product arrival, processing and transferring time distributions
- Test alternate scenarios for optimal throughput and utilization of the production system
- Identify and track simulation objective

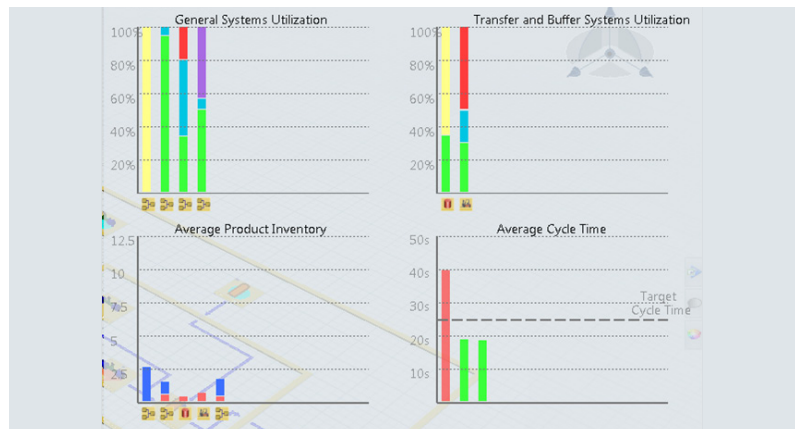
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Leverage manufacturing systems definition by simulating with a production scenario.



Analyze the system to evaluate capacity, utilization, and other performance metrics.