



## Applied SmartFactory® Production Control

An integration of factory automation workflows with simulation technology that improves factory operating efficiency and increases the ability to delivery to commitments through the execution and analysis of high-speed simulation scenarios

### INDUSTRIES

- Semiconductor wafer manufacturing
- Semiconductor assembly and test
- Display manufacturing

### FEATURES

- Detailed capacity analysis
- Out-of-the-box integration with APF RTD® and Activity Manager™
- Accurate capacity planning
- Pre-defined rules library
- KPI reporting and dashboards

### BENEFITS

- Increases profitability
- Improves planning and scheduling accuracy
- Offers a high degree of modeling detail
- Replicates production dispatching in a simulation environment
- Provides high-speed simulation
- Improves productivity by lowering cycle time and reducing variability
- Validation of dispatching rule policies

### CHALLENGES

Bridging the gap between factory capacity and customer delivery commitments can lead to under-utilized resources. This increases operating costs and leads to inefficient cycle times that can delay product delivery. Production and planning managers need a powerful capacity planning and simulation system to better predict and optimize the factory.

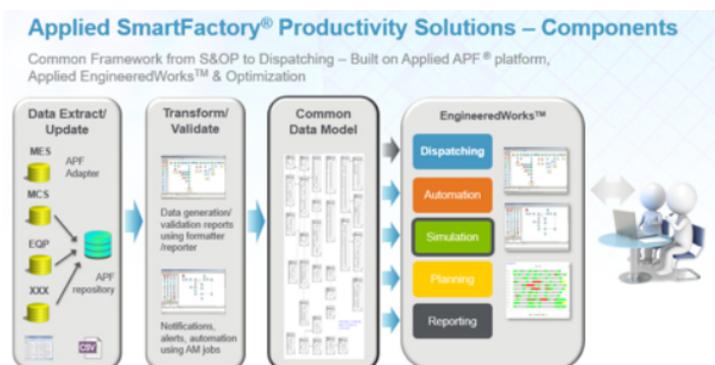
Some of the key challenges these manufacturers face include:

- Adjusting to factory events efficiently and effectively
- Meeting delivery commitments in the face of increasing manufacturing complexities
- Analyzing the effects of dispatching policy changes
- Increasing output and avoiding additional capital expenses
- Determining the impact of proposed product mix changes

### SOLUTION DESCRIPTION

SmartFactory Production Control enables production and planning managers to model their facility in order to make better manufacturing decisions. It runs high-speed “what-if” scenarios to determine opportunities for improving WIP throughput and capacity utilization – all without disrupting manufacturing operations. Production Control is an out-of-the box solution that can be deployed quickly to rapidly enhance factory operations.

### APPLIED SMARTFACTORY PRODUCTIVITY SOLUTIONS WITH ENGINEEREDWORKS®



The common framework from data extraction to logic of dispatching is built on the Applied APF platform and EngineeredWorks

EngineeredWorks is Applied's pre-built automation logic that executes on a proven Applied platform. EngineeredWorks increases speed-to-value for customers and provides quicker deployment times. When deploying SmartFactory Production Control with EngineeredWorks, customers can cut deployment times by more than **50%** compared to custom deployments.

Production Control Capabilities for Achieving Enhanced Factory Performance		
✓	<b>Capacity analysis and planning</b>	Determine the impact that system changes have in the factory, including when orders will be completed and how frequently to start new lots.
✓	<b>Predictive manufacturing</b>	Accurately predict lot completions and improve planning schedules.
✓	<b>Dispatching rule validation</b>	Validate and quantify the impact of new dispatching policy changes prior to running in production.
✓	<b>Common Data Model</b>	Supports common data model for all planning, dispatching, scheduling and simulation solutions.
✓	<b>Interactive analysis and scenario manager</b>	Supports a web-based interface for analyzing simulation results and managing execution of new scenarios. Easily accessible analytics and dashboards on devices with web access, including computers, tablets, and phones.

**\$1M-10M  
PER FACTORY**

### CUSTOMER RESULTS

Production Control customers increase system performance and reduce costs, leading to improved manufacturing profitability. Demonstrated results include:

- > 20% reduction in cycle time
- Reduced WIP and buffer levels
- Improved utilization
- Improved decision logic/rules

### PACKAGE CONTENTS

Designed to model your facility and analyze your data. The combined power of these components makes Production Control a flexible and easy-to-use tool for simulation, analyses, planning and optimization of your facility. SmartFactory Production Control offers proven technology in one package, which includes:

#### SOFTWARE

- Production Control EngineeredWorks
- AutoSched®
- APF Fusion®
- Activity Manager Limited

#### SERVICES, TRAINING AND SUPPORT

- On-site deployment provided by experienced Applied experts
- First year Solution Services and technology maintenance
- User training