Valor MSS Material Management

Just-in-Time Logistical Materials Flow to Production

PCB Manufacturing

DATASHEET



Valor MSS Material Management aggregates pull signals based on actual materials consumed, machine cycle times, and the completion status of the current and future work orders in real time, ensuring materials get to the right machine at the right time, avoiding material starvation. This optimizes the material flow from the warehouse to the factory floor.

Overview

Material management inside the factory occurs in different places and levels, requiring different types of support to efficiently keep track of your inventory. The Valor® MSS Material Management solution address this need, provides just-in-time technology to manage a consistent material flow to the production lines based on the actual demand. It offers four stages of material management, aimed to provide you with a flexible solution to address your specific production needs, helping you significantly reduce inventory, and ensure a smooth manufacturing flow.

Eliminate buffer stocks and guesswork by using a tight machine integration and precise inventory management. With Valor Material Management, the actual number of parts remaining on every carrier is constantly accurate and up-to-date by taking into account actual parts used in process through consumption and waste. The advanced just-in-time technology anticipates order completion, feeder exhaust points, upcoming changeovers, and supports operational constraints, eliminating bottlenecks and unexpected delays.

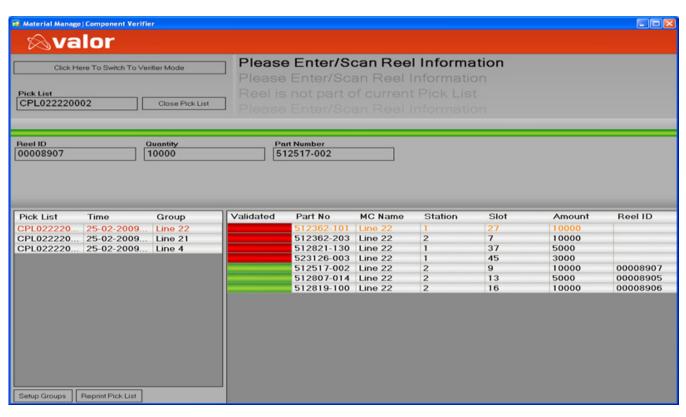
Tight Integration to the Shop Floor with Basic Material Management

The basic Valor MSS Material Management module uses MSS machine connections to gathers real-time performance information (e.g., program name, placements, dropped parts/waste, cycle time, wait time, and low-level warning data) for each material position. This information allows the material management solution to have an accurate view of the inventory down to the single-carrier level, and all data is stored in the MSS database and used by various parts of the material management software. The solution applies for all material consuming stations in the factory, including SMT, THT/odd-form placement, manual assembly, and system assembly as well as process points like screenprinter, dispenser, and coating.

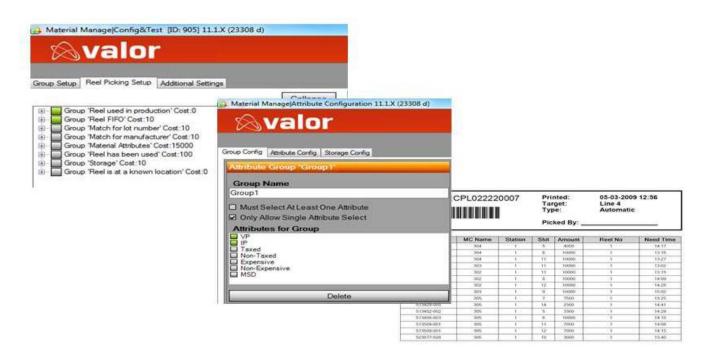
MAJOR BENEFITS

- Enables a smooth and continuous flow of materials between warehouse and shop floor
- Optimizes changeover time, reduces need for material counting
- Optimizes material usage for higher material turnover
- Removes excess material WIP from the shop floor
- Improves quality with MSD and AVL management
- Maintains inventory accuracy
- Enables accurate MRP ordering and planning





Verify each new pick list to ensure the correct part numbers and quantity for needed materials on a specific machine in advance to avoid errors, bottlenecks, and line stops.



Intuitive configuration dialogs allow setting up groups to evaluate the "cost" of the pick list. Material selection is made with cost rules in mind, along with attribute such as FIFO, MSD storage, or previous allocations.



Advanced verification ensures that all the correct materials (and tools) are set up before assembly, improving your efficiency and quality. It also provides you with maximal flexibility by supporting functions such as alternate parts, AVL, free feeder positioning, dynamic alternate positions, blocked material, safe splicing, etc. Valor Material Management also supports customer-defined material attributes (e.g., LED class, material consignment, etc.), along with dynamic BOM verification for LED light classes. It also supports barcode identification and smart feeders and splicing sensors, enhancing your productivity during the verification process.

Valor Material Management provides an automatic warning on PDA, along with a machine screen and dashboard when materials are running low, to help you stay updated at all times.

Additionally, Valor Material Management includes MSD management, with auto-alarms for any materials in any environment. Moisture-sensitive materials are identified at the material registration, and machine operations can be forced to stop if any materials expire. MSD management includes dry-store and oven-baking processes.

Improve Line and Operator Efficiency with Advanced Material Management

By eliminating downtime caused by delivery of the wrong parts or by waiting for materials to arrive, the Valor Material Management Advanced option improves manufacturing asset utilization. Just-in-time material delivery helps minimize WIP by keeping only the required materials on the shop floor. It automatically generates pick lists at the warehouse, based on the actual machine consumption and upcoming work orders. It presages the exhaust point of every material position and then aggregates each machine included in the supported region of the factory. Lines are easily divided into sections of the factory and can be supported by one master stockroom or separate stockrooms.

For the latest product information, call us or visit: www.mentor.com/valor

©2016 Mentor Graphics Corporation, all rights reserved. This document contains information that is proprietary to Mentor Graphics Corporation and may be duplicated in whole or in part by the original recipient for internal business purposes only, provided that this entire notice appears in all copies. In accepting this document, the recipient agrees to make every reasonable effort to prevent unauthorized use of this information. All trademarks mentioned in this document are the trademarks of their respective owners.

Corporate Headquarters Mentor Graphics Corporation 8005 SW Boeckman Road Wilsonville, OR 97070-7777 Phone: 503.685.7000 Fax: 503.685.1204

Sales and Product Information Phone: 800.547.3000 sales_info@mentor.com Silicon Valley Mentor Graphics Corporation 46871 Bayside Parkway Fremont, CA 94538 USA Phone: 510.354,7400

North American Support Center Phone: 800 547 4303

Fax: 510.354.7467

Europe Mentor Graphics Deutschland GmbH Arnulfstrasse 201 80634 Munich Germany

Phone: +49.89.57096.0 Fax: +49.89.57096.400 Pacific Rim Mentor Graphics (Taiwan) 11F, No. 120, Section 2,

Gongdao 5th Road HsinChu City 300, Taiwan, ROC Phone: 886.3.513.1000 Fax: 886.3.573.4734 Japan Mentor Graphics Japan Co., Ltd.

Gotenyama Garden 7-35, Kita-Shinagawa 4-chome Shinagawa-Ku, Tokyo 140-0001 Japan

Phone: +81.3.5488.3033 Fax: +81.3.5488.3004



12-16