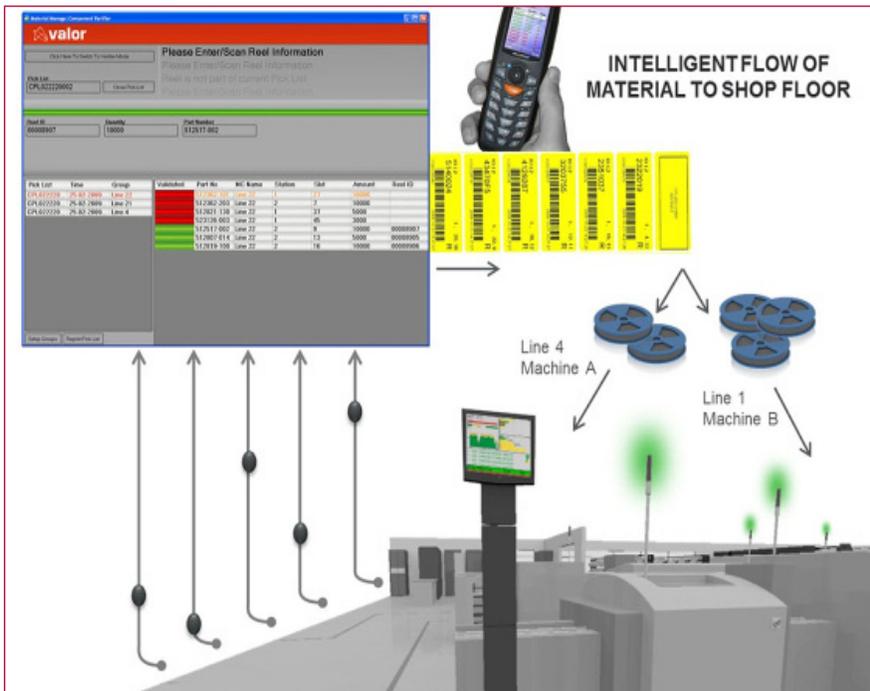


Valor MSS Material Management

Just-in-time logistical materials flow to production

Manufacturing

D A T A S H E E T



Valor MSS Material Management uses real-time operational data from the machine interface to aggregate pull signals based on actual materials consumed, machine cycle times and completion status of the work order, ensuring the right material flows to the right machine at the right time, anticipating and avoiding exhaust points and material handling bottlenecks.

MAJOR BENEFITS:

- Reduce shop floor WIP
- Reduce stockroom inventory
- Improve line utilization and productivity
- Improve high volume production flow with balanced material delivery
- Improve high mix production flow with grouping of feeder trolleys
- Improve responsiveness to changes in material
- Eliminate material bottlenecks
- Reduce cost of obsolete parts
- Improve operator task efficiency
- Reduce space requirements with less inventory
- Empower ERP investment
- Improve inventory accuracy

Overview

The Valor® MSS Material Manager uses just-in-time technology to provide Lean flexible material flow to the production lines based on the actual demand. This material delivery mode has many benefits, including a significant reduction in the amount of inventory needed to assure smooth manufacturing flow. Buffer stocks are completely eliminated as all the guess work is removed from the process with tight machine integration and precise inventory management. The actual number of parts remaining on every reel is always maintained, based on actual parts used in process through consumption and waste so that inventory accuracy is greatly improved. The just-in-time technology anticipates order completion, feeder exhaust points, upcoming changeovers and supports operational constraints. This creates a production flow without bottlenecks coupled with optimized inventory levels and streamlined production that easily adapts to changes in the production schedule.

Reduce Inventory

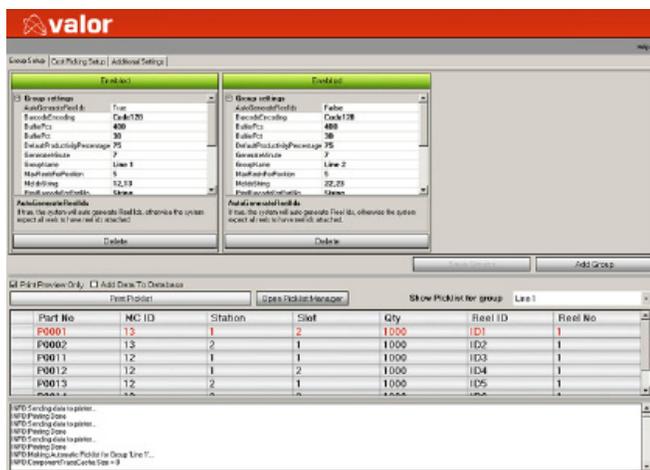
Shop floor WIP and stockroom inventory is reduced by eliminating the need for huge material kits and buffer stock. This is accomplished in several ways. First, by improving the accuracy and precision of inventory, the need to over supply is removed. Second, by delivering only what is needed every thirty minutes or so based on how fast material is actually being consumed on the line(s), and third, having the ability to split reels without loss of traceability or accountability, and taking advantage of material already on the machine but still required for the next work order. All of this is enabled by automatically tracking the consumption and waste of material from each reel so that the system knows at every transaction point the count of material remaining on every reel, and the precise location of each reel, from initial registration of new reels into inventory bins, to kitting and splicing operations by feeder location on the machine or trolley, checking in or out of dry storage or bake, and finally return-to-stock transactions as needed.

Tight Integration to the Shop Floor

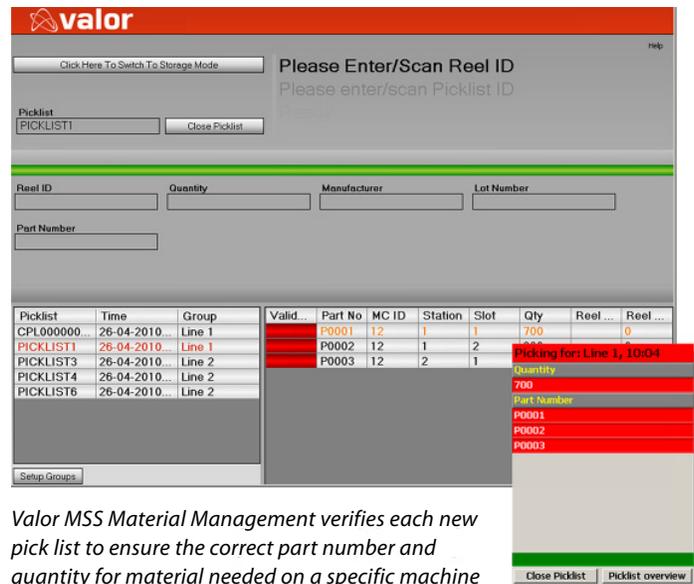
The Valor MSS Material Management module takes advantage of MSS machine connections. The machine interface gathers real-time performance information such as program name, placements, dropped parts (waste), cycle time, wait time and low level warning data for each feeder position. This information is stored in the MSS database and used by the Material Management software. A generic machine interface is available as well so that all SMT machines in the factory can be covered.

Improve Line and Operator Efficiency

By eliminating down time caused by delivery of the wrong part or by waiting for material to arrive, Valor MSS Material Management improves manufacturing asset utilization. The software anticipates the exhaust point of every feeder, which are then aggregated for 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 a separate stockrooms.



Valor MSS Material Management provides production scheduling with tight integration to the other MSS shop floor applications. This screen shows the configuration dialog where groups are set-up and the "cost" of the pick list is evaluated. Picking materials is done with cost rules in mind so that attribute such as FIFO, MSD storage or previous allocations are considered and lowest cost material is selected.



Valor MSS Material Management verifies each new pick list to ensure the correct part number and quantity for material needed on a specific machine before a certain time to avoid errors and line stops.

The changeover time to run either a new single work order or a grouping of work orders, is supported with a changeover guide. The "guided" changeover steps the operator through each feeder position on the machine or trolley. The guidance takes advantage of material that may already be present on the machine from the previous setup.

The system removes all the guesswork for machine operator and material handlers. Line operators do not have to focus on tracking exhaust points on specific feeders.

Empower ERP investment

ERP/MRP systems typically are not able to accurately track material on the shop floor in real time like Valor MSS Material Management does. This software complements ERP functions by providing real-time data on consumption, waste and transactions into the ERP system. The net effect is to greatly increase the accuracy of information that drives ERP functions and adding value to the ERP system.

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