CLOSING THE INFORMATION GAP

Actionable Intelligence for the Workplace: Factory MES provides Increased Productivity through Real-Time Shop Floor Management

BROCHURE
Accelerated continuous improvement and efficient manufacturing execution are the foundation to staying ahead of the competition and expanding margins for any producer in this globally competitive landscape. This means eliminating wasteful activities, maximizing the performance of existing assets, and having the agility to flex the organization in real-time.

Manufacturing Execution Systems offer organizations a route to accelerated performance by unlocking the greatest assets within their factories – their people and plant. Armed with real-time information on production operations and per-unit costs, factory floor teams are able to implement immediate reviews, make real-time adjustments and measure immediate performance improvements. This actionable intelligence is made possible by bridging the disconnect between the factory floor and the wider enterprise. Disparate data silos are consolidated into a single transparent intelligence engine that exposes and attacks waste, sets goals for improvement, and transforms the workplace into a culture of action.

Factory, the leading manufacturing execution system solution, integrates the functionality of shop floor data capture, packaged metrics like overall equipment effectiveness (OEE), constraint analysis, manufacturing analytics and scorecards, continuous improvement capabilities and paperless quality management. By converting the investments already made with MES or shop floor data acquisition into actionable intelligence across the enterprise, Factory provides a seamless flow from day to day factory floor activity through to board-level intelligence.

Manufacturers are sustaining productivity gains by using real-time intelligence to identify priorities for long-term improvement, including product innovation, improved service delivery, pinpointing priorities for capital investment strategies, and eliminating waste across multiple areas and sites, as well as setting new performance targets for their factory teams. Making the shift to a real-time factory is enabling process and discrete-intensive manufacturers to maximize margins, cut costs and take on market share.
“Increased visibility is a key driver for improvement that aligns with our goal of self-directed work teams. The teams now have means of validating current state and post improvement.”

Barry Galbraith
Operations Manager,
Nature’s Path Foods, Inc.
ACTIONABLE INTELLIGENCE WITH MANUFACTURING EXECUTION SYSTEMS

Factory is designed to transform manufacturing performance by empowering people to make real-time actionable decisions. The software integrates the functionality of shop floor data capture, packaged metrics like OEE, constraint management, analytics and scorecards, continuous improvement capabilities and paperless quality management.

MAXIMIZING EXISTING DATA SILOS
The solution takes advantage of the existing IT infrastructure, linking control and MES systems on the factory floor with the wider enterprise applications such as ERP, MRP and corporate analytic software over intranets, extranets, or the internet without the need for modifications. Factory’s patented technical architecture means lower cost of ownership, superior data integrity and security.

CORE COMPETENCIES
- Real-time performance and plant data management
- Process constraints and production scheduling
- Continuous improvement and compliance management
- Automated quality assurance process
- Executive scorecards & strategic analytics
- Increased workplace engagement
- Maintenance response management
- Material handling management
- User experience - common browser and mobile interface

Enhanced user experience
INDUSTRY FOCUS: CONSUMER PACKAGED GOODS

Internal pressures to manage costs and increase productivity continue to build. Meeting external challenges – such as retailer-specific demands, regionalized requirements, and complex compliance regulations – is increasingly critical. CPG manufacturers are deploying Factory to achieve real-time operational transparency and optimize available people and plant resources.

The Factory suite can be implemented in less than six weeks per factory. It identifies true production constraints, trims materials costs, cuts change-over/start-up times, and drives an action-oriented culture throughout the workplace.

“Factory brought real-time focus to daily activities and issues. This has in turn changed the way we own and correct issues.”

Don Reese
Continuous Improvement Manager,
Litehouse Foods
FACTORY MES COMPETENCIES

**PERFORMANCE | Real-time Performance Management.** Identify all manufacturing losses, measure OEE, monitor product costing in real-time and control crew performance. Standardize change-over’s and start-ups. Combine the power of automated plant data with the intelligence of the workplace employees. Enforce best practices by the action cycle engine triggering frequent reviews and pre-formatted data to assist the workforce to maintain flawless performance.

**ANALYTICS | Enterprise-wide Factory Intelligence.** Analytics identifies variations in plant, SKU, value stream and shift performance pinpointing priorities for improvement and capital investment. Deploy packaged dashboards and manufacturing metrics to support operational excellence initiatives including OEE, mass balance, throughput averages against SKU, standards variances, quality conformance, and crew performance. Use ‘drill down’ and ‘what if’ capabilities to deliver intelligence on costly manufacturing root causes, production constraints and unprofitable products across the plant network.

**IMPROVE | Continuous Improvement Campaign Management.** Provide complete transparency of improvement initiatives throughout the factory and wider enterprise. Re-ignite corporate CI initiatives and close the loop between potential and actual improvements using pre-built capabilities. Manage improvement campaigns online fuelled using root cause analysis and known methods including Kaizen Blitz events, and Six Sigma. Engage continuous workforce commitment through direct shop floor interaction and review points. Benchmark and compare improvements across the enterprise.

**QUALITY | Quality Assurance.** Enable paperless compliance and tracking of all Quality Assurance processes throughout the factory floor. Automate checks related to production quality and reduce give-away through SPC control. Real-time outputs and control links coupled with automated alerts ensures deviations from perfection are dealt with immediately. Manage the full life-cycle of quality sign-off with online certificates, electronic signatures to support any number of check types including HACCP, ‘spot check’ audits and full product audit inspections.

**REAL-TIME LOGIC ENGINE | Data Transformation.** The Real-Time Logic Engine is a bi-directional, high performance Boolean logic engine designed to function as an OPC bridge and consolidator. RTLE is able to read and write to multiple underlying OPC servers while applying Boolean logic and transforming data in real-time. For more complex processing, a full featured scripting language is available providing you with the ability to create your own functions. A powerful trigger-and-action capability is built into RTLE’s data handling, allowing for sophisticated monitoring, calculations, and automated responses.

**MATERIAL HANDLING | Planning and Production Accuracy.** Material handling enables order importation from ERP systems to include data detailing planned product and quantity. Factory MES identifies the raw materials and inventory required to produce the order including full lot, location, and tracking information. This allows automated order and material tracking through the production process, with final production details including accurate consumption records shared with the ERP system. Material handling eliminates error-prone, time consuming and wasteful paperwork normally required for recording and sharing these manufacturing details.
“Factory has caused a culture change and heightened awareness toward OEE vs. standard efficiency numbers we used to use as a reference. There is more focus on all aspects of operation now.”

Neal Moegenburg
Director of Manufacturing,
Master Gallery Foods, Inc.
CUSTOMER SUCCESS

Factory is used worldwide by over 350 factories that span a broad spectrum of industry verticals including Food & Beverage, Automotive, Packaging. It has been configured to suit both the needs of both multi and single site operations.

ACTIVATE RAPID COST SAVINGS WITHIN WEEKS

Companies seeking to verify their potential performance gains with Factory can take advantage of the Factory Profit Audit which gets to the heart of where the greatest immediate margin improvements can be realized from your plant(s). The audit establishes an agenda for rapid performance improvement utilizing real-time intelligence and the greatest continuous tool available to you: the hourly paid workforce. It will calculate those areas that can be improved the fastest, at the least cost, and with the greatest impact.

CUSTOMERS

- American Italian Pasta Company
- Aurora Organic Dairy
- B&G Foods
- Boots Contract Manufacturing
- Coca Cola Bottling Co. Consolidated
- Intersnack
- Kens Foods
- Nicepak
- Ralcorp
- TEVA Women’s Health
- Windsor Foods

The technology is combined with a proven change method that focuses on developing a structure of daily performance reviews to drive better performance every run, every shift, every day. The process develops shop floor skills so the teams are able to drive their own improvements and is deployed typically in six to eight weeks per factory. Results are fast and dramatic and highly visible by week 10.

For multi-site rollouts Factory is deployed using a standard Project Execution Template (PET), enabling rapid deployment and standardization across the enterprise, creating a standard platform for managing and measuring daily operations.

Our complementary consulting services are designed to assist our customers in managing this change and achieve the maximum benefits enabled by Factory. Buy-in, involvement, risk management, and senior level commitment are the essential elements to changing behavior. We bring together a multi-disciplinary team with specific expertise in project management, shop floor buy-in, continuous improvement, MES plant automation, and technical configuration.

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<th>Premium Waters, Inc.</th>
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<td>LAKESIDE FOODS</td>
<td>10% efficiency uplift</td>
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<td>Pinnacle</td>
<td>$2M OEE improvement in under a year</td>
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<tr>
<td>BAY VALLEY FOODS</td>
<td>5% efficiency uplift in under a year</td>
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CLOSING THE INFORMATION GAP WITH FACTORY MES

The shop floor is the heartbeat of any manufacturing organization. The ability to see data in real time and enable your operators to act upon it immediately is critical in today’s competitive environment where every opportunity for improvement, no matter how big or small, counts.

Unlike generic MES systems, Factory is a purpose built packaged application, designed for specific industries, which requires no customization and is typically deployed in less than six weeks per factory.

This ensures a higher probability of success, shorter time to benefits and the flexibility needed to support growth and change. Different to other MES systems, our technology is combined with a proven change method that focuses on developing operator skills and a structure of daily performance reviews to drive a better performance every run, every shift, every day.

Learn more about how Factory can help you identify and tap hidden operational efficiencies in your plants. Contact us today to discuss your needs and arrange a demo: www.aptean.com/factory.

“Being a 24/7 operation, Factory allows me to see how the plant is performing from any location and time. It gives us the information needed to make good decisions and improve efficiency.”

Dave Bauereis
Operations Manager,
Premium Waters Inc.

About Apteon: Aptean helps businesses profit, innovate and grow where the work gets done—in the call center, on the floor of the factory, at the end of the assembly line. That’s where Aptean’s CRM, ERP and Supply Chain software applications enable nearly 5,000 customers to satisfy their customers, operate more efficiently and stay at the forefront of their industry.

Aptean is where software WORKS. For more information, visit www.aptean.com