

Manufacturing Operations Management

MANUFACTURING



SYSPRO's Manufacturing Operations Management (MOM) solution can help you revolutionize your company to remain competitive in today's market. It provides complete manufacturing life-cycle management from planning, scheduling, publishing, collecting, tracking and analysing, to optimize and improve end-to-end manufacturing operations. Together with SYSPRO's ERP this Manufacturing Execution System (MES) offers a unique level of delivery, cost and quality control of manufacturing operations for job shop, batch production, production line and mixed mode environments.

The solution encompasses the following:

- Advanced Planning and Scheduling
- Shop Floor Data Collection and Tracking
- Factory Digitisation and Automation
- Factory Performance and Loss Management
- Lean Manufacturing and Continuous Improvement

The Benefits of Manufacturing Operations Management

Increase Productivity, Minimise Loss and Lower Production Costs

SYSPRO's Manufacturing Operations Management solution can help you take control of your manufacturing operations and start to:

- Deliver to your customers faster
- Control labour and machine costs
- Reduce downtime and bottlenecks
- Increase productivity and output
- Measure and improve product quality
- Reduce cost to compete

The solution helps manufacturers:

- Measure performance to drive to world class standards of operation for overall equipment effectiveness (OEE), total effective equipment performance (TEEP) and overall labour effectiveness (OLE)
- Increase productivity and lower costs by minimizing loss within the business
- Optimize operational efficiencies through better workflow of core manufacturing activities: schedule, publish, collect, track, analyse and improve
- Connect machines and other devices to digitize the factory (Industry 4.0) and gain a competitive advantage

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Manufacturing Operations Management Features

A 360° view of production

MOM supports your complete manufacturing life-cycle, providing you with 360° view of you production

- **Schedule:** quickly and accurately schedule to maximize order fulfilment and resource utilization
- **Collect:** collect data from the shop floor from humans and machines
- **Track:** gain real time visibility of employees, equipment and jobs
- **Analyse:** access out of the box analytics for OLE, OEE and TEEP
- **Improve:** drive continuous improvement with Six Big Loss, online documents and more

Any Device, Anywhere

SYSPRO's Manufacturing Operations Management solution makes use of the latest technologies to provide a modern and intuitive, browser-based user interface, allowing you to gain visibility over any stage of the manufacturing process, from any device.

Smart Factory

Enables you to connect equipment to digitize your factory by collecting data from your machines and other devices automatically. In terms of future-proofing your business by embracing Industry 4.0, the technology offers the foundation to building your Smart Factory. By embedding interactive technology in key machines, manufacturers can look to creating more intelligent manufacturing processes.

Advanced Planning and Scheduling

Incorporates an advanced, finite capacity based, planning and scheduling (APS) system allowing you to quickly and accurately schedule while minimizing downtime.

- **Visual Planning Board:** define your resources and their available capacity via the shifts that they operate. Create, optimize and share your production schedules online. Publish job lists to your resources for easy data collection
- **Dashboard:** balance equipment utilization and order fulfilment to maximize factory output. View your most/least utilized resources, top orders by value and popular products by volume
- **Production Plan:** view the agreed production plan. List and/or print shop packets. Review progress including hours reported, quantities produced and issues logged to expedite and/or provide delivery information
- **Equipment Plan:** review the impact of the production plan on your equipment. Drill down into each equipment card to view loading detail and expected daily output
- **Production Status:** review open jobs to check their status. Use progress bars to gain visibility of hours booked, materials issued and overall progress at a glance. Drill down to view specific job details including attached documents and production issues
- **Job Lists:** view job and material lists by resource groups for today or this week designed for use with mobile and/or tablet devices
- **Production History:** view activity history in relation to both open and closed jobs

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Shop Floor Data Collection and Tracking

Incorporates shop floor data collection (SFDC) from your employees and equipment.

- **Workbench:** collect data both on and off the shop floor from your employees or equipment in real-time using a “stopwatch” style of recording for accuracy. Data recorded here is used to support the calculations of overall labour effectiveness (OLE) and overall equipment effectiveness (OEE)
- **Connect Equipment:** digitize your factory by collecting data from your machines and other devices automatically
- **Dashboard:** high level view of your orders, products, employees and equipment. Select specific employees and equipment to view status and performance for a selected time period
- **Employee Status:** at-a-glance live view of your employees...what their current status is, what they are working on, and how they are performing during their shift. Drill down into each employee card for a detailed view. Use status indicators to access their workbench to help with clocking and other management issues
- **Equipment Status:** at-a-glance live view of your equipment...what the current status is, what jobs they are running, and how they are performing during the shift. Drill down into each equipment card for a detailed view. Use status indicators to access the equipment workbench for management purposes
- **Job Status:** review open jobs to check their status. Use progress bars to gain visibility of hours booked, materials issued and overall progress at a glance. Drill down to view specific job details including attached documents and productions issues.
- **Transaction Review:** review (edit, delete, add) and/or approve all transactions generated via the workbench or entered from timesheets. Automate, scheduled posting of approved transactions to SYSPRO for financial analysis. Manual “sync now” option also available. Export to payroll systems (optional)
- **Employee Performance:** detailed analysis of an individual employee performance with supporting detail including audit trails, daily clocked hours reconciliation and a record of the issues encountered
- **Equipment Performance:** detailed analysis of an individual equipment performance with supporting detail including audit trails and a record of the issues encountered
- **Management Reports:** analytics associated with employee availability (uptime/downtime) for management purposes. Includes daily clock hours reconciliation and option to create custom management reports using pivot tables

Factory Digitisation and Automation

Allows you to connect machines, measuring equipment and other devices to read data automatically without the need for manual inputs. Gain real time visibility of:

- Start/stop and downtime
- Job assignment
- Operation status (e.g. operation complete)
- Machine status (e.g. warming up; idle; running; down)
- Parts count (total, good and bad)
- Component count (total, good and bad)
- Performance issues (e.g. slow running; equipment wear; component jam)
- Custom values (e.g. temperature; pressure; spindle speed)

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Factory Performance and Loss Management

Provides out of the box factory performance and loss analytics to allow your organization to drive to world class standards for overall labour effectiveness (OLE), overall equipment effectiveness (OEE) and total effective equipment performance (TEEP).

Utilizes Six Big Loss analysis to identify, classify and quantify your loss enabling you to determine the countermeasures that will help to reduce them.

- **Loss Management:** dashboard realization of loss across your manufacturing operations with every loss identified, classified (Six Big Loss) and quantified to allow for countermeasures to be applied and continuous improvement to be made
- **Dashboard:** factory level analytics of your equipment showing both OEE and TEEP key performance indicators. Drill down to supporting metrics and measurement of Loading, Availability, Performance and Quality
- **Employee Analysis:** detailed analysis of your employee performance. Filter by individual employees or analyse performance for a specific group of employees. Further analyse by date or diversion
- **Equipment Analysis:** detailed analysis of your equipment performance. Filter by individual equipment or analyse performance for a specific group of equipment. Further analyse by date or diversion
- **Product Analysis:** output and quality analysis for your products by employee and/or equipment
- **Loading:** detailed analysis of the loading position of your resources with comparisons to last month and/or quarter to understand trends
- **Availability:** detailed analysis of the availability of your employees or equipment with comparisons to last month and/or quarter to understand trends
- **Performance:** detailed analysis of the performance of your employees or equipment with comparisons to last month and/or quarter to understand trends
- **Quality:** detailed analysis of the quality output from your employees or equipment with comparisons to last month and/or quarter to understand trends

Lean Manufacturing and Continuous Improvement

Helps to drive lean six sigma continuous improvement initiatives with management alerts, issue logging and workflow, online documents and more...

- **Management Alerts:** receive performance management alerts to improve efficiencies and prevent issues becoming problems
- **Messaging:** send and view messages to and from the shop floor
- **Issue workflow:** view, assign and resolve custom and/or performance related production issues
- **Paperless Shop:** manage and maintain static attachments or online forms related to jobs, operations, employees, equipment. Add hyperlinks to videos and/or document management systems where audit trail or document versioning control is required.
- **Anytime, Anywhere:** access mission critical information whenever and wherever you need it via tablet and/or mobile devices