

Highlights: Manufacturing

SYSPRO 8

Reference Guide

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Manufacturing

The following provides a summary of the newly-developed features and functionality available in **SYSPRO 8**.



Anticipating marketplace disruptors, SYSPRO ensures governance and improved business efficiencies.

Ongoing improvement and continuous innovation provides industry-built capabilities that evolve with your needs.

2021-R1

WIP by Branch improvements

The **WIP by Branch** feature (which initially introduced ledger integration for work in progress at branch level) has been extended to include separate control accounts at work center level - useful when jobs are in transit during the production process.

A job transfer feature has also been added to let you track the total costs of a job when transferring a job between operations. The job's total cost is transferred to the WIP branch ledger account of the next operation. The WIP branch defined for the work center is used when posting labor transactions.



If ledger Integration for WIP is by job classification within the WIP branch, then the ledger account for the job classification is used for the job master as well as labor and material allocations.

BOM Cost Implosion Optimized for SQL Server

This feature optimizes the BOM Cost Implosion for SQL without using the file system as a temporary scratch pad.

Affected Programs

- Cost Implosion

The feature is *disabled* by default so that existing systems work unchanged. To enable the new SQL-optimized BOM Cost Implosion, you must *uncheck* the new processing option: **RUN COST IMPLOSION IN LEGACY MODE**.

- BOM Cost Implosion

The `BOM_COST_IMPLOSION`¹ business object is used to calculate and update costs using SQL-only statements (instead of temporary files). The business object is only used if you uncheck the **RUN COST IMPLOSION IN LEGACY MODE** option of the **Cost Implosion** program.

¹Business object: BOMTCI

2020-R2

WIP by Branch

The **WIP by Branch** feature extends ledger integration options to include integration at branch level (only job classification was available before). This means that each branch and job classification can have separate WIP ledger control accounts. Previously, you could only define a single WIP control account and WIP variance account per company.

You can enable WIP branches for the following:

- Jobs
- WIP inspections
- Job numbering
- Job classification

2020-R1

MRP Optimized for SQL Server

This feature optimizes the MRP calculation for SQL without using the file system as a temporary scratch pad.

Affected Programs

- Requirements Calculation

The feature is *disabled* by default so that existing systems work unchanged. To enable the new MRP SQL Optimization, you must uncheck the new processing option: **Run calculation in legacy mode**.

If you are retaining the legacy processing method, then ensure that the snapshot folder still exists.



When using the new MRP SQL Optimization process, the progress bar only displays the text: **Processing Requirements Calculation** during the entire process.

- MRP Requirements Calculation object

The MRP_REQUIREMENTS_CALCULATION¹ business object takes advantage of this feature to perform the MRP calculation.

Job Nesting

The **Job Nesting** feature has been extended to include manufacturing units of measure (MUM). This means you can use the stocking, alternate, manufacturing or other units of measure when issuing stock to the nested job.

Affected Programs

- WIP Nest Processing

The **Unit of measure** field was added to the **Issue Materials** pane. This lets you select the unit of measure when issuing materials to the job nest.

Recall Management

The **Recall Management** feature now includes any traceable parent item that has been received into stock. This ensures it can be quickly and easily located in the supply chain.

By implication, it means that lot and serial traceable items received through jobs, inventory movements, backflushing or purchase orders are now included when selecting items you want to recall using the **Product Recall Selections Review** program.

¹Business object: MRPTRC

Recorded Dates

You can now capture and save dates against specific lots to manage the shelf life and expiration dates of traceable items. These dates include: **Use by date, Sell by date, Internal expiry date, Manufacturing date, Dispatch date** and **Best before date**.

In most cases, the additional lot date fields are hidden by default and must be selected using the **Show Captions** option from the context-sensitive menu.

Affected Programs

- Purchase Order Receipts
- Purchase Order Inspection
- Shipment Receipt
- Bins, Lots & Serial Capture
- WIP Inspection Document Print
- Job Receipts
- WIP Inspection
- WIP Inspection Accept into Stock
- Job Receipts
- Factory Documentation Format

eSignatures

Access and maintenance of recorded dates are included in and controlled by the following eSignatures:

- WIP Stocked job receipts
- WIP Stocked job receipts e.net
- PO Apportion quantity receipt
- WIP Inspection (accept)
- WIP Inspection (accept) e.net
- Inv Receipt
- Inv Receipt e.net

2019-R2

Recall Management

Archive Maintenance

The **Include** function has a new **Product recall** selection option that lets you include product recalls when archiving files.

Purge and Archive

A **Product Recall Archive Details** section has been added that lets you specify criteria according to which you want to archive product recall details. Options include:

Field	Description
Product recall archive	Select this to include product recall data when archiving.
Product recall archive number	This indicates the archive file name that is generated.
Product recall completed	This indicates the cut-off date according to which you want completed product recall records to be archived.
Product recall comment	This lets you add a comment for archived product recalls.

Lot Product Recall Detail Report

This is a new program that lets you print a detailed report of product recall information.

Lot Product Recall Summary Report

This is a new program that lets you print a summary report of the most essential product recall data.

Recorded Dates

The **Recorded Dates** feature lets you better manage the life-cycle of your products by enabling you to record several industry-specific dates against items.

The dates are captured and saved against specific lots, allowing you to manage the shelf life and expiration dates of your products. Dates include: use by date, sell by date, internal expiry date, manufacturing date, dispatch date and best before date.

2019-R1

Recall Management

The **Recall Management** feature caters for a request from a manufacturer to return a product after the discovery of safety issues or product defects that might endanger the consumer or put the organization at risk of legal action.

A product recall can be applied at warehouse, bin, stock code, lot or serial level (effectively placing them on hold) and may affect sales orders, jobs, parent parts and kits.

The product recall process includes stock items that were manufactured, sold and delivered to the customer, as well as items that were receipted into stock and are still residing in the warehouse.

LCT Bill of Landed Costs - Copy function

The **Bill of Landed Costs** program lets you copy a bill of landed costs from a specific stock code to a single, a range or a defined selection of stock codes.

Quality Management System - Recorded Dates

Phase 1 of this feature has been released and is focused towards the Food and Beverage industry (as well as similar industries like pharmaceuticals) where expiry dates are regulatory.

In order to properly manage the life-cycle of a product, there is often the requirement for a unique range of recorded dates that need to be attached to any product.

New functionality in the **Lot Number Maintenance** program enables industries to record a further range of dates, where previously **Expiry Date** was the critical date recorded.

2018-R1

Job Nesting

The **Job Nesting** feature lets you combine several small jobs into one larger nested job process. This lets you view and select combinations of work orders that can be batched together into larger processes (e.g. you can nest multiple jobs using the same raw material or components).

The result is a reduction of waste and operational costs, optimized use of raw material and resources, and improved efficiencies.

Benefits:

- Group jobs requiring the same raw material (such as sheets) to a nested job. Optimize the raw material and labor usage against the nested job.
- Record actual raw material and labor usage against the nested job as well as results of the nest.
- Disburse material, labor and scrap against the original jobs on completion.

Manufacturing Operations Management (MOM) Manufacturing Operations Management

SYSPRO's Manufacturing Operations Management solution helps manufacturers measure performance in a drive towards world-class standard of operations for overall equipment effectiveness (OEE), total effective equipment performance (TEEP) and overall labor effectiveness (OLE).

It increases productivity and lowers costs by minimizing loss within the business. Operational efficiencies are optimized through better workflow of core manufacturing activities (e.g. schedule, publish, collect, track, analyze and improve).

It facilitates the connection of machines and other devices to digitize the factory (Industry 4.0) and gain competitive advantage.

Benefits:

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

Any Device, Anywhere

Makes use of the latest technologies to provide intuitive mobile and browser-based UIs via Smartphones, PDAs, Tablets, Bar code scanners and PCs. Extensive online views make it easy for you and your team to gain visibility over any stage of the process, from any device.

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 fulfillment 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.

Shop Floor Data Collection and Tracking

Incorporates shop floor data collection (SFDC) from your employees and equipment with options to automatically connect your machines in order to read data without manual inputs.

- Workbench - collect data in real time both on and off the shop floor from your employees or equipment using a stopwatch style of recording for accuracy. Data recorded here is used to support the calculations of overall labor 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... their current status, 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... the current status, 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 the scheduled posting of approved transactions to SYSPRO for financial analysis. Manual 'sync now' option also available. Export to payroll systems (optional).
- Equipment performance - detailed analysis of an individual equipment performance with supporting detail, including audit trails and a record of the issues encountered.
- 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.
- 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 Digitization

Allows you to connect machines measuring equipment and other devices. You can automatically connect with machines to read data without manual inputs.

Gain real time visibility of:

- Start/stop and downtime.
- Job assignment.
- Operation status (e.g. operation completed).
- 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).

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 labor 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 counter measures 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 improvements 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 analyze performance for a specific group of employees. Further analyze by date or diversion.
- Equipment Analysis - detailed analysis of your equipment performance. Filter by individual equipment or analyze performance for a specific group of equipment. Further analyze 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.
- Safe and Secure - sign-in authentication with full organizational control to restrict information that can be viewed by workgroup or individual.
- Quality Assured - the solution has been formed around IEC62264, the globally recognized standard for manufacturing operations management - providing the tools and analytics essential for effective manufacturing operations management to help you compete in today's market.



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