OptiPro Manufacturing **MAKING THE Complex Simple**

www.optiproerp.com

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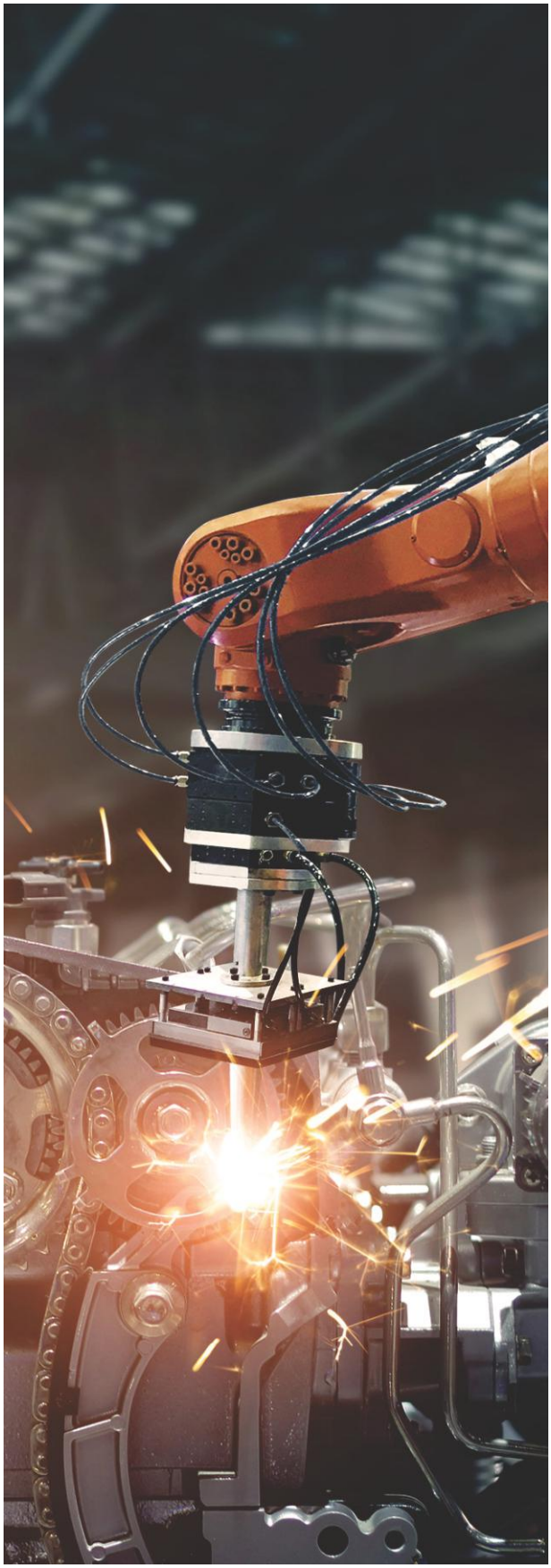


OptiPro Manufacturing

Maximizing productivity and visibility for small and midsize discrete manufacturers.

Businesses need software solutions that empower them to peak performance. OptiPro Manufacturing with SAP Business One, is a complete business management

solution for manufacturers. It combines the functionality of SAP Business One, the leading platform for small and midsize businesses, seamlessly integrated with the robust manufacturing capabilities in OptiPro Manufacturing.

OptiPro Manufacturing with SAP Business One streamlines operational efficiency and provides real-time visibility across the business. It offers greater insight and increased control that drives profitable growth.

Affordable

Competitively priced for small and midsize manufacturers

Comprehensive

A complete business management solution with one database

Industry Expertise

Built for manufacturers by manufacturing and ERP experts

Easy to Use

A user interface that's simple to understand yet robust

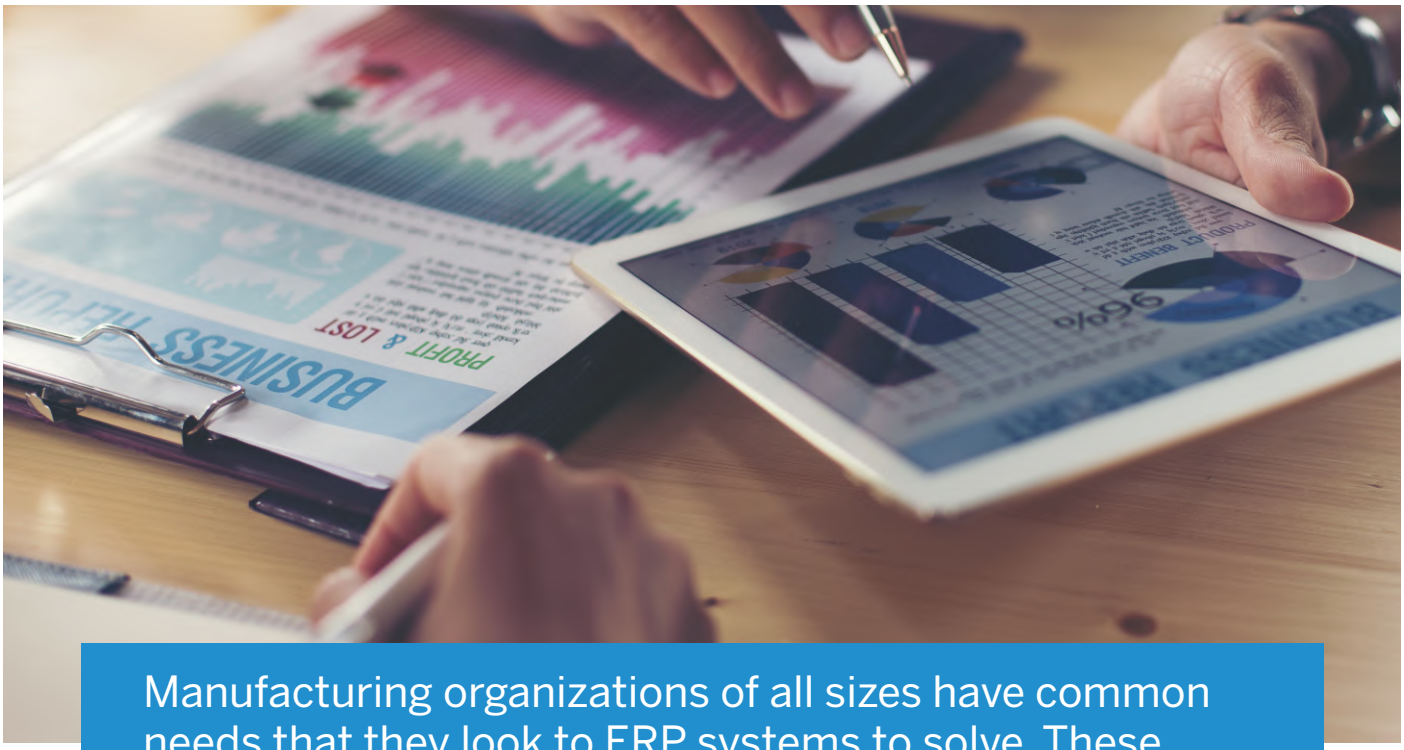
SAP Business One

Built on the #1 platform for small and midsize enterprises

Future-Proofed

An innovative and scalable foundation that grows with you

Manufacturing Challenges

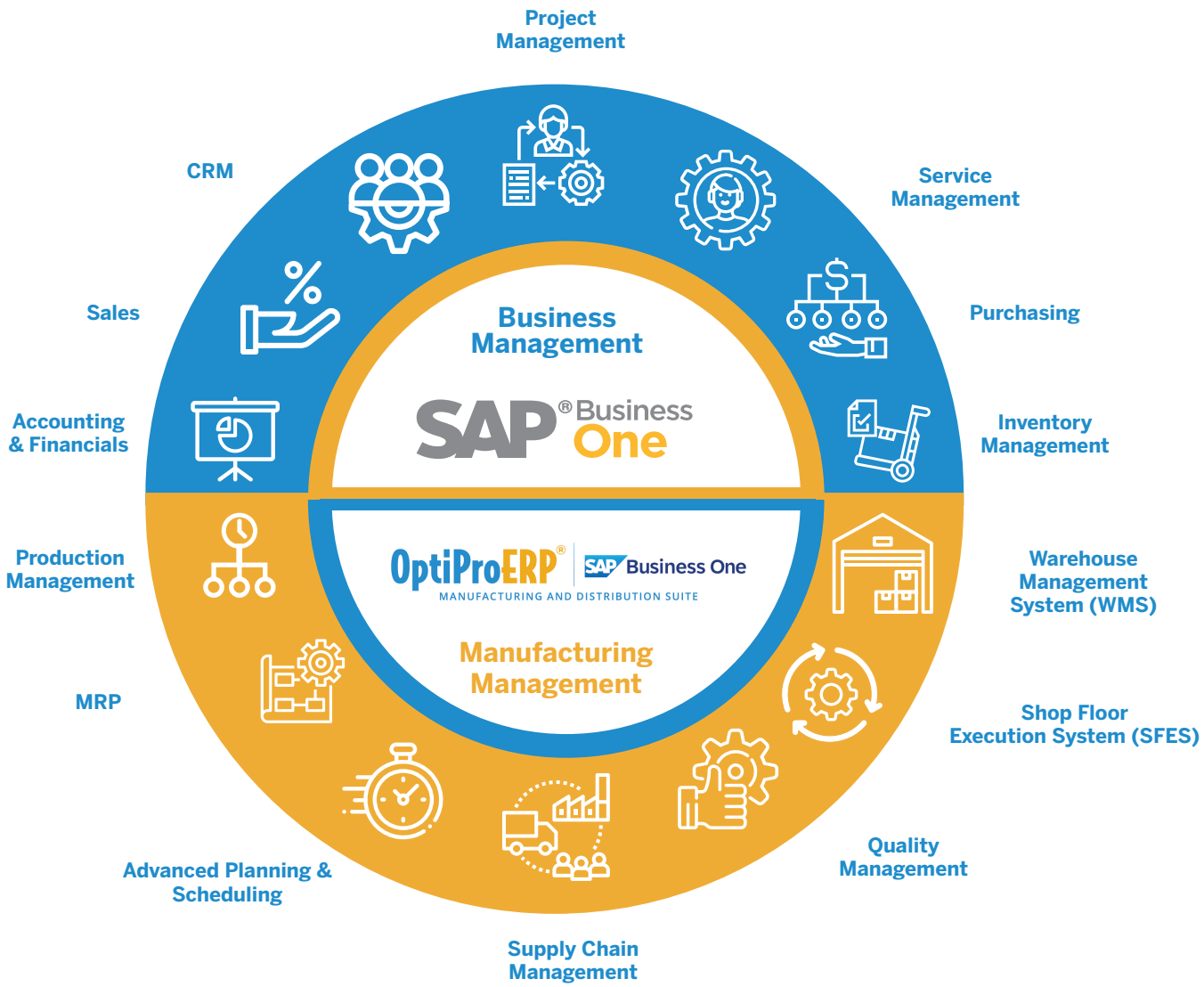


Manufacturing organizations of all sizes have common needs that they look to ERP systems to solve. These include:

- Compliance with industry, government, and customer requirements
- Instant access to inventory, production, and other business data
- Optimize manufacturing and business processes for greater efficiency
- Plan and schedule production effectively to meet customer demand
- Have real-time business insight for informed decision-making
- Pro-actively manage the supply chain and collaborate with vendors
- Have departments connected and improve employee workflow
- Easily identify and quickly act upon new trends and opportunities

Modules and Functionality

OptiPro Manufacturing with SAP Business One provides a complete business management system for manufacturers in one seamlessly integrated solution.



Please note that OptiPro Manufacturing is sold as a single manufacturing ERP solution that is fully-integrated with SAP Business One.

OptiPro Manufacturing can also be sold as a manufacturing add-on for businesses already on SAP Business One.

Advanced Planning & Scheduling

- Forecast - The Forecast screen lets you generate forecasts based on historical sales records or manually entered forecasts. You can enter the forecast data daily, weekly, and monthly.

- Forecast Demand Group – The Forecast Demand Group enables you to group multiple forecasts created in the Forecast window. It maps demand forecasts made in the Forecast window in planning. For numerous companies/legal entities, the Forecast Demand Group is created in each source company and collates in the Planning Engine.

- Intelligent Forecast Based on Historical Data - This function involves leveraging advanced algorithms and historical data to generate predictions of future demand, enabling efficient inventory planning and production scheduling for optimal business operations.

- Sourcing Rule Master - The Sourcing Rule Master screen enables you to automate the sourcing process by defining the vendor from whom you want to buy, defining warehouses/companies from which materials need to be transferred, and define in which company you want to produce the product(s).

- Sourcing Rule Group - The Sourcing Rule Group screen enables you to define a sourcing rule group for the Item Code and the Item Group.

- Data Collection - The Data Collection screen collects data from source companies. It is available in each Planning Engine Database.

- Maintain Simulation Data - This screen allows changes in the date and quantity of any source document for simulation type of plan definitions. This screen is applicable only for simulation data. The Maintain Simulation Data screen is available in the Planning Engine Database.

- Copy Simulation Data Screen – The Copy Simulation Data screen allows for a copy of snapshot data from one plan definition to another. The Copy Simulation Data screen is available in the Planning Engine Database, where users can copy purchase orders, sales orders, production orders, inventory transfer requests, forecasts, and purchase requests through the screen.

- Unified Planning Engine - OptiPro Manufacturing combines MPS and MRP into a single planning process within the APS Dashboard. The system simultaneously plans production and material requirements, automatically generating Production Orders, Purchase Orders, and Purchase Requests while providing recommendations, exceptions, and real-time visibility for efficient manufacturing and supply chain planning.

- Release Order - The Release Order screen is used to search for planned orders and firm orders. It can release the orders associated with the actual transactions for the respective companies.

- RCCP - RCCP stands for "Rough-Cut Capacity Planning." It is a high-level capacity planning technique used to assess whether an organization's production capacity is sufficient to meet the projected demands over a given time horizon. RCCP considers the availability of resources, such as labor, machines, and tools, to determine if any capacity constraints might arise and to develop preliminary production plans.

- Create a New Schedule - The operations will become visible on the scheduler upon releasing production orders. Users can initiate the process by creating a new schedule, and they will have the flexibility to arrange it according to their requirements using the drag-and-drop functionality.

- Modify Existing Schedule - This option empowers users to modify previously created schedules and make necessary adjustments efficiently. Users can easily achieve this by dragging the operations to their desired slots.

- Scheduling Workbench - Upon selecting your preferred option from the Schedule Selection screen, the Scheduling Workbench (SWB) dashboard is presented. Within this dashboard, users gain the capability to manage their work orders and operations effectively.

Container Management

- Container Receiving – When receiving a container, it can be created in the system, and all information received from the vendor(s) can be entered regarding contents and shipment data, including landing costs. Containers can be received with items from multiple vendors.
- Container Packing – Create a container with eligible lines selected from different sales orders to a customer.
- Track Shipments – Containers can be tracked from when they are shipped until they reach their final destination.
- Update Purchase Orders - Add all open PO lines with quantities loaded to the container.
- Packing Calculations - When shipping a container, you can estimate what will fit in it based on the weight and dimensions of each item. It will calculate that information to help you determine what will fit inside.
- Receive Containers – The container is received, and inventory is automatically updated.

Estimation

- Admin - The Admin section encompasses various screens, including Attribute Master, Attribute Group Master, Rule Master, Rule Assign Master, EST Additional Information, and EST Configuration. This section enables users to create attributes for different items and define rules using the Rule Master, facilitating the creation and analysis of estimations.

- Masters - The Masters section comprises essential screens, including Assembly Relationship, Catalog Master, Markup Category, Overhead Master, Department Master, Resource Master, Estimate Group, Material Cost Element, and Part Master.

- Estimation Wizard - The Estimation Wizard facilitates the generation, creation, or modification of quotations while also enabling the computation of various costs. It guides users through system prompts to proceed with the necessary actions, including creating a BOM and Routing.

Product Configurator

- Item Code Generation - The Item Code Generation screen enables users to create a distinctive item code and associate it with a specific string or number.

- Attribute Master - This section is dedicated to defining the attributes of a product. An attribute can be described as a distinctive feature or property of a product. For example, if the product is a door, an attribute could be "door height." These attributes can be associated with dimensions, hierarchies, or other properties defining the finished good.

- Model/Feature Master - This section creates new models, such as "laptop," along with associated features like RAM, processor, battery, and other configurable elements. These models and features are instrumental in the configuration process.

- Feature BOM - A Feature Bill of Materials (BOM) is a comprehensive list of intermediate components that constitute a collection of feature options available for a product. For example, a mobile (a finished good item) can have multiple models (M10, M20, M30), each offering distinct features. Its feature BOM may encompass options such as RAM: 2 GB, 3 GB, 4 GB, and more.

- Model BOM - A Model Bill of Materials (BOM) is an extensive list of intermediate components, sub-assemblies, or raw materials essential for producing an Item Model. For instance, the Model BOM would comprise model-specific features like screen, processor, battery, and other required elements to manufacture a smartphone model.

- Routing - In the OptiPro Manufacturing Product Configurator, Routing defines the manufacturing steps for an item. It allows you to import Model BOM and Feature BOM Routing from SAP Business One, streamlining BOM configuration, price computation, and sales order/quotation generation on a single platform, reducing efforts significantly.

- Archiving - Archiving is a systematic process of relocating data no longer used for long-term retention. Within the application, this option enables users to preserve documents efficiently.

- Configuration Wizard - This wizard facilitates the creation of a sales quote or sales order tailored to a specific model based on the features selected during the configuration process. It also prompts for the creation of a BOM and Routing.

Production Management

- Bill of Materials - BOM is a comprehensive and structured list of all the raw materials, components, sub-assemblies, and assemblies required to produce a finished product. It serves as a blueprint for the manufacturing process, specifying the quantity and hierarchy of each item needed to construct the final product.

- Routing Master Data - Routing Master Data refers to a critical set of information that outlines the sequence of operations and steps required to manufacture a specific product. It provides detailed instructions for the production process, specifying the machines, work centers, tools, and labor resources needed at each manufacturing stage.

- Calculate Routing Lead Time - Routing lead time calculation computes lead time components in hours and work days to produce quantity equivalent to one BOM unit mentioned on the routing. These values are stored in the routing header, routing lines, and routing resource tables and used at the time of the production order release to calculate work order lead time and total lead time of the work order and its operations.

- Operation Master – The Operation Master in the discrete manufacturing database contains detailed information about each production operation, including work centers, resources, setup time, run time, and work instructions.

- Item Standard Cost Calculation – The Item Standard Cost Calculation consists of four components: Material Cost, Material Overhead, Labor Cost, and Labor Overhead. This screen allows you to define material overhead by item group or a specific item.

- Item-Raw Material Relationship Master - In specific industries, a raw material (i.e., a metal sheet or material) can manufacture multiple finished goods items by cutting small pieces from a single sizeable raw material item. This screen is used to record details of such raw material and link with multiple corresponding finished goods.

- Raw Material Conversion Template Master - The Raw Material Conversion Template Master defines the list of finished goods, offcut and return material, and scrap items produced from raw material. This template is used to execute the transaction for the conversion process.

- Item-Raw Material Conversion Transaction - This screen is used to execute the transaction, and in the process, the raw material defined quantity will be issued from the inventory, and the finished goods/offcut/return material and scrap will be received to inventory.

- Resource Skill Master – The Resource Skill Master is a database containing details of the skills possessed by personnel or equipment in a manufacturing environment. It aids in resource allocation and task assignment.

- Resource Instances - The Resource Instances define the employees, tools, and equipment used in any work center. It helps a planner to get information on what resources are associated with any work center that can be used during production.

- Resource Mapping - The Resource Mapping option lets you synchronize multiple resources to perform the operation process. For instance, if you are using two resources, 'Machine and Labor,' to perform a single operation, then the resource mapping option enables you to synchronize both resources at the time of need.

- Alternate Resource - The Alternate Resource screen allows the user to create an alternate resource when the allotted resource is unavailable. It will enable you to make any alternate person, tool, or machine resource whenever needed.

- Resource Capacity Calculation - Refers to determining the available capacity of production resources, such as machines, work centers, or labor, to perform specific tasks or operations within a given time frame. It involves evaluating the maximum workload that each resource can handle and comparing it with the demand placed on those resources by production orders or scheduled tasks.

- Generate Barcode Labels - OptiPro Manufacturing enables users to print item labels with barcodes containing details like items, batch, and serial information anytime for efficient inventory tracking and product identification.

- Production Order - A document that authorizes the production of a specific quantity of finished goods. It includes details such as the product to be manufactured, quantity, scheduling information, and instructions for the production process. The Production Order serves as a guide for the shop floor, ensuring that the correct materials, resources, and operations are executed to produce the desired product efficiently and to comply with quality standards.

- Production Order Management - The Production Order Management window caters to production managers and supervisors, allowing them to efficiently perform bulk release, scheduling, and task generation for shop floor users.

- Operation Move Order - The Operation Move Order screen is to switch from one workstation/work center/assembly line or operation to another. You can create a move order for all functions, including setup, to report the completion of each procedure. The raw material consumption is shown on processing a move order.

- Issue Material/Resource (Backflush/Manual/Operation Issue) - Use this screen to issue materials and resources for production orders. There are three types of issue methods.

- Backflush Raw Material Issue Method - The Backflush Raw Material Issue Method is an inventory management technique where raw materials are automatically deducted from stock upon completing a production order, simplifying record-keeping and reducing manual transactions.

- Manual - Raw materials are deducted from stock when consumed during the production process, requiring manual record-keeping and transaction entries.

- Operational Issue Method - The Operational Issue Method is an inventory management approach. Raw materials are automatically issued and recorded at specific production operations/stages, enabling accurate tracking of material consumption during manufacturing.

- Engineering Change Order - An Engineering Change Order (ECO) describes the suggested engineering change, with details of processes and BOM that would be affected. It includes the request for review and approval from the group/team/departments to whom the change would impact. ECOs are used to modify components, assemblies, associated documentation, and other types of product information.

- Sub-Contracting – The Sub-Contracting function involves outsourcing manufacturing tasks to external suppliers. It's an operation in the production routing master, where the system generates a purchase request for the task's completion.

- Production Order Scheduling - This option helps to schedule and generate tasks for an operator/user. You can use this option as an alternative to logging in to the SFES (Shop Floor Execution System) application and scheduling tasks from there. Once the job is scheduled and generated by the manager, the operator can execute it.

- Receipt from Production – This feature refers to receiving finished goods produced internally into inventory. It involves updating stock levels, capturing production details, and generating corresponding documents to record the receipt.

- Production Order Review and Closure – This option involves examining and validating production orders before concluding the manufacturing process. This includes verifying the produced quantity, quality, and adherence to specifications. Once verified, the production order is officially closed, stock levels are updated, and associated documents are closed.

- Production Availability Check Report - This report is designed to provide the availability status of materials and resources required to execute a production order. The system includes information on whether you can manage the production order. The report considers new production orders to calculate the availability of materials and resources required.

- Production Order Traveler - This report is used to track the status of production operations. It lets you generate a summary of operations with details like quantity ordered, completed, rejected, and passed for items with status in process.

- Component Where Used Report - The Component Where Used Report is a document that lists all the products or assemblies in which a specific component is utilized within an organization, aiding inventory management, production planning, and product tracking.

- Production Pick List Report - The Production Pick List Report generates a list of available raw materials on a FIFO basis, which can be picked for production.

- Inventory Shortage Details - This is to identify and report shortages of required materials and components necessary for the production process. This report helps production planners and managers to proactively address and resolve inventory shortages, ensuring a smooth and uninterrupted production workflow.

- BOM View - This section enables users to efficiently navigate, explore, and access detailed information about various components involved in the manufacturing process of a finished good. These components include raw materials, parent, intermediate, and child items.

- RCCP Report - Utilize this report to access comprehensive task details related to a manufacturing operation. You can select the plan definition and plan order number through this menu to review the specific information associated with the desired manufacturing operation.

- Lot Genealogy Menu - This menu encompasses two essential options: Lot Explosion and Where Used. Additionally, it provides two common choices, single-level and multi-level, applicable to both lot explosion and where functionalities are used.

- Production Details - This menu allows users to access comprehensive details related to a Production Order, including information about the associated material and Unit of Measure (UOM). It also provides visibility into quantities of items in stock, amounts committed by the user, order status, and product descriptions.

- Work Center Status - Utilize this section to apply filters for work orders, enabling you to narrow down results based on specific criteria such as work centers or production orders with statuses of released and in process exclusively.

- SFES Work Order Status - This section provides an overview of work orders, allowing users to access detailed information regarding orders categorized as in progress, overdue, new, scheduled, pending, and closed. By selecting specific criteria such as warehouse, work center, and scheduled dates, users can view comprehensive details about resources and operations within each work order.

- SFES Resource Allocation - This section facilitates the retrieval of resource-related details based on specified selection criteria.

- Operator Efficiency - This menu item visually presents interactive operator efficiency. The grid displays operator, operation, standard time, actual time taken (in hours), and percentage efficiency by comparing standard and actual times. Normal time is retrieved from the OptiPro Manufacturing Production Order, while the application calculates the actual time when the operator clicks start at the beginning of the operation and clicks at finish upon completion.

- Efficiency Dashboard - This menu section comprehensively evaluates operational efficiency through an efficiency dashboard. The dashboard features a bar graph and table, facilitating comparative analysis of planned vs. actual time, planned vs. actual quantities, planned vs. actual cost, and scrap (rejections).

- Production Order Based on Sales Order - This function facilitates the generation of production orders based on existing sales orders in OptiPro Manufacturing. Clicking this button will prompt the Sales Order Selection Criteria screen, allowing users to define suitable criteria for creating a production order.

- Schedule Work Order - This function efficiently schedules and releases production orders in bulk, aligned with project requirements. Once the production orders are successfully released and scheduled, the corresponding tasks will become visible within the Shop Floor Execution application.

- Process Production Order - This section is used for the following tasks:

  i) Moving a production order from one operation to another (Move Order)

  ii) Receiving finished goods on completion of a production order (Receipt from Production)

  iii) Closing a production order after the completion

Quality Management

- QC Plan Master - A systematic plan ensuring products meet quality standards, outlining measures, responsibilities, and monitoring for quality maintenance in production, including inward and outward transactions.

- QC Specification Master - In the QC Specification Master, define the list of variables and attributes associated with the item specifications. These item specifications help to create the test definitions in combination with the QC plans and sub-plans.

- Test Criteria Definition - In the Test Criteria Definition, create or edit test criteria based on the inspection status and lot/batch sizes. The user can define the test criteria based on the criteria group by specifying the sampling plan type and sampling level.

- Inward QC Function – The Inward QC Function helps to perform the QC inspection process for the incoming material. Based on the QC inspection results, QC-applicable items will be transferred to the target warehouse.

- Ad-hoc QC Function - This function can conduct unplanned or unscheduled quality control inspections and tests, addressing unexpected events or specific quality concerns to ensure compliance and product integrity.
- Shipping QC Function - This function helps perform the QC inspection process for the QC-applicable items while processing sales orders and before dispatch.
- Production QC Function - This function helps perform the QC inspection process for the items during production orders. These QC steps are considered operations within the routing master data.
- CAPA - Corrective and Preventive Actions (CAPA) are integral to Quality Management as they aim to prevent future non-conformances. Corrective actions address and eliminate existing non-conformances, while preventive measures are taken to avoid the reoccurrence of such issues proactively.
- Test Data Collection - Test Data Collection facilitates the input of QC test result data for records where the QC test results have not been processed yet.
- Non-Conformance Records - Non-Conformance (NC) Records are generated after QC is completed to document instances of non-conformance. These records are then subjected to disposition, and items can be retested for re-grading or undergo QC testing after rework.

- Disposition Records - The Disposition Records screen is utilized to input disposition details, which may encompass a group of NC records with similar characteristics requiring review by the MRB (Material Review Board).
- Rework - The Rework function enables users to rectify issues in the production process by redoing specific operations. Re-work operations are typically initiated through NC records and dispositions.
- QC Order - This screen serves the purpose of directly recording QC data through the web application.
- TDC Screen - This screen is utilized after completing the QC order to access document details and post the QC results in OptiPro Manufacturing.

Shop Floor Execution System

- Generate Task - This screen generates tasks for production orders based on the entered operation details. The application comprehensively displays all tasks associated with a production order within the specified date range.

- Schedule Task - This screen facilitates the association of specific resources with respective operations through the accessible tab of resource instances. Consequently, tasks can be scheduled accordingly, and if necessary, tasks can be divided or split as well.

- Task Progress Reporting - Task Progress Reporting entails the documentation of move orders, time tracking, and other relevant task-related particulars for production orders. This includes recording work time, scheduled breaks, downtime, breakdowns, interruptions, and task aborts.

- SFES Log - This screen is designed to monitor the status of production orders, presenting three available statuses: error, new, and processed.
- Accounted Resource Time - This functionality allows for adjusting the time required for a specific resource to execute the operation.
- Reports - Within SFES, users can access a standard report option to review their task reports and print labels. These options include "Print Task," "FG Label Report," and "Batch/Serial Info."
- Managers can assign production tasks to technicians.

Supply Chain Management

- Predictive Notifications - Alerts to actual and potential disruptions and opportunities.
- Real-time Collaboration - Communicate with suppliers in real-time on capacity, forecasts, and orders.
- Dynamic Dashboards - A single view of orders, shipments, inventory, and vendor performance.
- Global Trade - Control parcel shipments and ensure cross-border trade compliance.
- Supplier Web Portal - Suppliers can log in 24/7 to view purchase orders and other pertinent information.
- Supplier Management - Create, track, and maintain supplier-purchased items and pricing in one shareable location.
- Supplier Performance Dashboard - Monitor quality issues, on-time delivery, and performance, and track all supplier transaction information.
- KPI Reporting - Executive-level reports that measure the effectiveness of the supply chain and graphs for visual representations of data.

Warehouse Management System

- Inbound - This section is utilized to receive goods for which a purchase order, AP reserve invoice, and delivery document have been established. Each receipt, associated with a corresponding PO, AP reserve invoice, and delivery, is recorded through this screen. Additionally, this process enables the creation of new GRPO documents and return documents as required.

- Outbound - This section is dedicated to managing goods delivery and goods issue processes, for which a sales order and picklist document have been maintained. It facilitates the creation of corresponding delivery documents for each sales order.

- Pick and Pack - After the pick list is generated in OptiPro Manufacturing for delivery, the WMS user can access the application to review the details. Subsequently, the user can proceed with the picking activity and select and retrieve the items from the warehouse. During this process, the user updates relevant pick-related information, including the packing slip, to ensure accurate tracking and documentation of the items for the delivery process.

- Shipment Container Load/Unload - This section is used for shipment container loading and unloading.
- Inventory Transfers - This section is used to manage the inventory in the warehouse. With the help of this section, stock can be transferred from one warehouse to another warehouse, or from one bin to another bin.
- Palletization - Palletization is a systematic method of storing goods on pallets, offering a standardized approach for safe storage and efficient goods transfer. Users can execute pallet-related transactions within the WMS application, such as creating pallets, transferring items, and merging or splitting pallets.
- Adjustments & Counting - The Adjustments & Counting feature facilitates the execution of physical and spot count operations for items.
- Production - This section manages production-related issues and receipt transactions.
- Label Printing and Reports - This section manages report-related transactions and label printing. Options available include item labels, bin labels, inventory inquiries, and external reports.

About Us

Our Team

OptiProERP's leadership brings decades of hands-on experience in manufacturing, distribution, and ERP software. We cut our teeth in manufacturing – tool and die, engineering, automation, and shop floor. And we have over 30 years of experience developing manufacturing ERP software. Headquartered in Orange County, California - a key tech and business hub - and with more than 350 employees around the world, OptiProERP is more than a software provider. We are a total business solution and partner for small and midsize manufacturers.

Our Technology

Built with SAP Business One at its core, OptiProERP extends a world-class and best-practice business management / digital core platform to provide innovative ERP software and comprehensive professional services together as a "whole" business solution. OptiProERP allows manufacturers to enter into the world of comprehensive and future-ready technological solutions that are typically available to larger companies but at a cost that is attractive to small and midsize companies. Now, with OptiProERP, comprehensive business management and manufacturing tools are available to small and mid-sized manufacturers without the cost and complexity.

Years in Business	Customers	Employees	Global Offices
20+	3000+	350+	3

OptiProERP® | SAP Business One

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