

## SYSPRO in the **Engineer-to-Order**

### **Manufacturing Environment**

Essential to success is having integrated systems that can foster customer and supply chain collaboration, provide comprehensive visibility to your operations and address the specific challenges inherent in your operational environment.

SYSPRO provides an end-to-end solution for engineer-to-order manufacturers by helping to streamline and integrate quote-to-invoice processes, and improve operational planning and financial management.

SYSPRO embodies the customer-centric philosophy. We focus on enabling our customers to excel by providing world-class integrated solutions that span multiple functions and place as great an emphasis on collaboration as transactions.

SYSPRO software incorporates integration and business process management layers into existing Enterprise Resource Planning (ERP) applications that manufacturers can use to create their own customer-centric business processes.

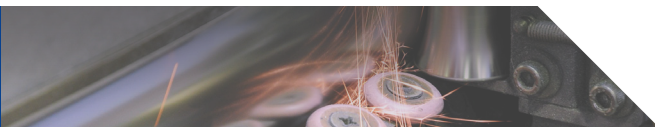
SYSPRO Manufacturing software integrates seamlessly with SYSPRO Financials and Distribution.



## SYSPRO solutions for the Engineer-to-Order manufacturing environment

SYSPRO's integrated nature provides real-time, complete visibility across your operations. Its easy-to-use, powerful functionality promotes improved manufacturing and operational efficiency, as well as excellent customer service, throughout the entire enterprise:

- Import facilities and SYSPRO e.net Solutions facilitate improved electronic collaboration with your customers for the creation of custom designs, thereby improving quote and order turnaround.
- The capability to integrate with **CAD systems** allows you to import and export multi-level bills of material from and to the design models. This reduces double-entry and the margin for error, as well as provides a solid basis on which to calculate costs, prices and lead times for quotations. In addition, other product-related data such as technical drawings can be imported and linked to the relevant products in SYSPRO, while photographs, video clips and other multimedia files can be linked and viewed on-demand.
- The **bill of material** and **engineering change control** functionality enables improved control over product development and re-versioning activities, while rapid, accurate quotation generation is facilitated through SYSPRO's **product configurator, estimating and quotations** features. These ensure the integrity of lead time, cost and profit calculations for bid processes in project, as well as job shop, environments and provide comprehensive evaluations of material, operational and overhead costs for single or multiple routings. Further more, SYSPRO provides the capability on confirmation of a quote to automatically raise all actions related to fulfilling the customer order.
- Extensive purchase order and blanket purchase order functionality, as well as SYSPRO's **electronic collaboration tools**, ensure fast and secure communication of purchase orders to suppliers around the globe.
- Forecasting and re-order point mechanisms, along with flexible replenishment rules, enable you to hedge against unpredictable supply of longer lead time raw materials.
- **Material Requirements Planning** and **Advanced Trial Kitting** provide facilities for calculating what you need and when you need it, taking into account the configured sources of demand and supply, lead times, current inventory levels and order policies.
- SYSPRO **Factory Scheduling** assists you in maintaining accurate, up-to-date production schedules that take account of your material plans and the complexities of your factory. This enables better co-ordination between work centers, increased productivity, reduced work-in-progress and achievement of improved customer service levels. Scheduling functionality extends from single-constraint scheduling to multi-constraint scheduling and sequencing.
- The **Work in Progress** module enables the capture, costing and tracking of time, materials and overheads consumed in production.
- The **Multi-level Trial Kitting** program enables you to quickly check that you have all components required for a job or bill of jobs before issuing any materials or launching a job onto production and, if not, where shortages exist. And the Kit Issues program determines the exact issues required for a user-defined range of job operations, thereby helping to avoid cluttering the production area with unnecessary raw material inventory.
- For complex long-cycle projects, SYSPRO's **Projects and Contracts** module enables detailed analysis of activities and costs by user-defined section. This provides instant fine-grained visibility to project cost performance, and identification of sunk costs and cost reimbursement values, with the user-defined sections enabling clear differentiations between development phases, as well as own-versus-collaborative efforts. Furthermore, it enables tracking of uncommitted and committed costs at a detailed hierarchical level in real time and highlights any differences between planned and actual costs as they occur. Retentions, deposits and flexible project payment methods are catered for.
- Together with its **Enterprise Performance Management suite**, SYSPRO's integrated nature gives you visibility to related information across your business, on multiple dimensions, from local and remote locations. It includes a variety of powerful analysis tools such as **Executive Dashboards, Cash Flow Forecast, Analytics** and **Financial Ratios**. Its easy-to-use, powerful functionality promotes improved manufacturing and operational efficiency, as well as excellent customer service, throughout the entire enterprise.
- **Advanced trial kitting**



## Key features and functions in SYSPRO for the Engineer-to-Order manufacturing environment

Advanced trial kitting provides you with a simple method of calculating date-driven material requirements when a full material requirements planning run is not needed. You use it to determine date-specific material requirements for which supplies must be raised, in order to satisfy date-driven demand for a range of manufactured products from various demand sources. A simple review of the calculated results enables seamless creation of supply orders, whether they be works orders, purchase orders or warehouse transfers.

### ■ CAD system integration

Using either SYSPRO's import facilities or e.net Solutions, you can seamlessly integrate your CAD designs with SYSPRO's Bill of Material module. This removes the need to recapture, thereby saving time and reducing the possibility of transfer errors. Additionally, you can use SYSPRO's multimedia features to link objects such as drawings, designs, certificates and video clips to part numbers, to inform production staff and provide them with quick links to the relevant paperwork.

### ■ Estimating

SYSPRO's estimating functionality enables the definition of the materials and manufacturing processes required for the manufacture of custom-made items. Furthermore, it provides cost and lead-time calculations to enable you to derive accurate price and delivery information.

### ■ Hierarchical jobs

Hierarchical jobs enable the estimating, recording, costing and tracking of project-based transactions for the relevant project section. This facilitates the analysis of expected and actual costs, revenues, billings and profit in measurable user-defined deliverables, as well as the linking of labor tasks and material requirements to the relevant section. In this way SYSPRO assists you in tracking the progress of the different sections of project work against budget. This in turn helps you to identify cost overruns as they occur, as well as unplanned changes in scope that may require variation orders to be raised.

### ■ Interactive graphical planning board with drag-and-drop operation editing

The interactive graphical planning board features of SYSPRO's Factory Scheduling are geared towards providing schedulers with complete visual control over scheduling activities. This is achieved via Gantt charts and other visual representations of production resources, load and schedules which, in addition to the more sophisticated automated scheduling and sequencing features, provide the capability for rapid manual manipulation of operations via drag-and-drop editing.

### ■ Jobs

Through its structured design and capability to copy from existing jobs, the jobs function in SYSPRO enables the rapid entry of production orders for the manufacture of both standard and non-standard products, as well as for service and project jobs. Central to the Work in Progress module, its integrated nature simplifies the creation of jobs by facilitating the automatic creation of materials and internal and sub-contract labor allocations from bills of materials and estimates, as well as from product configurations formulated using SYSPRO's Product Configurator. Furthermore, it simplifies the entry of non-standard allocations for the engineer-to-order manufacturing environment and enables the rapid creation of bills of jobs.

### ■ Job actuals versus estimates

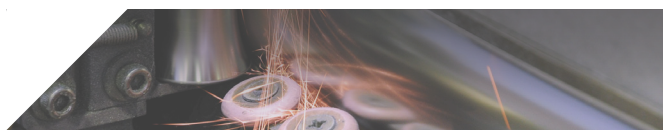
This feature provides the tools for you to compare, at a glance, the actual costs for a job against the expected costs, thereby enabling you to identify and investigate cost variances as they occur. For a job for a manufactured product, the basis of the expected costs is derived from the materials and operations defined against the bill of material, or estimate, in the case of quotations. Work in progress queries and reports enable you to view the comparisons at job (labor and material totals), material allocation and labor allocation level. The Job Cost Recalculation program allows you to recalculate the expected cost totals for labor and materials, thereby providing a more realistic comparison if allocations are added after the job has been created.

### ■ Linked sales orders, purchase orders and jobs

Particularly useful in an engineer-to-order environment, the ability to create linked sales orders, purchase orders and jobs in SYSPRO provides a quick and simple way of raising and linking the transactions required to fulfil a customer order.

### ■ Materials-based scheduling

SYSPRO's Advanced Scheduler provides you with the means to automatically schedule around sub-assembly and component material availability, thereby enabling optimal schedules within a material-constrained scheduling environment. The Advance Scheduler takes into account inventory levels, multi-level bills of material, existing jobs for sub-assemblies, and purchase orders for materials when calculating and pegging demand to supply. In this way it ensures parent-item jobs are not scheduled before pegged sub-assembly jobs.



### ■ Product configuration

SYSPRO's Product Configurator enables manufacturers to differentiate their product offerings through the ready customization of product to meet customer specifications. The Product Configurator provides a rules-based configurator that will primarily help companies efficiently process products that are manufactured to order, assembled to order or sold in many configurations. It can also help reduce configuration errors and the involvement of experts in routine transactions.

### ■ Progress payments, deposits and retentions

SYSPRO's Projects and Contracts module enables you to record a deposit from your customer on acceptance of your quotation for project work, as well as the method and schedule of billings for the project invoicing. Additionally, you can record an amount or percentage of the contract value that will be withheld by your customer for a prescribed retention period, enabling you to define the terms of your customer's final payment, as well as the timing of final invoicing on a project.

### ■ Quotations

The Quotations function is an indispensable tool in the engineer-to-order manufacturing environment, reducing client quote turnaround times through its structured design, ease of use and capability to copy from existing quotes. Central to the Quotations module,

it provides an ordered approach to formulating multiple offers to sell products and services, and is fully integrated with the rest of SYSPRO, thereby ensuring the currency of associated data and the integrity of calculations.

### ■ Scrap recording and tracking

SYSPRO's progressive scrap utility enables you to easily track scrap at every operation and measure scrap tolerances, thereby facilitating more accurate production costs and lead time calculations. Scrap can also be tracked against components at material level.

### ■ Serial tracking

Serial tracking is designed to provide full tracking at transactional level for those items that have serial numbers assigned for warranty or compliance purposes. The serial numbers can either be unique per individual item, or the same for a batch of items.

### ■ Traceability

Particularly for companies in highly regulated industries, the tracking and replacement of defective materials, as well as the efficient management of product recalls, are compliance-critical activities. SYSPRO's traceability features facilitate the tracking of materials through the receiving, manufacturing, assembly, inspection, stocking and final dispatch stages. This comprehensive traceability helps stream-line product replacement and recall activities. ❖

## About SYSPRO

SYSPRO is an internationally-recognized, leading provider of enterprise business solutions. Formed in 1978, SYSPRO was one of the first software vendors to develop an Enterprise Resource Planning (ERP) solution. Today, SYSPRO is a global business solutions vendor, represented on six continents and by more than 1500 channel and support partners. Over 14,500 licensed companies across a broad spectrum of industries in more than 60 countries trust SYSPRO as the platform on which to manage their business processes.

Customer focus is a core component of SYSPRO's corporate culture and is one of the key reasons why SYSPRO maintains a strong leadership position in the enterprise application market. By focusing on people and building lasting relationships with customers and partners, SYSPRO consistently excels at guiding customers through all aspects of their implementation and ongoing usage. The aim is to deliver world-class software that gives customers the control, insight and agility they need for a competitive advantage in a global economy. As such, SYSPRO provides a unique combination of robust, scalable technologies that ensure minimal risk and a high return on investment.

SYSPRO is continually developing remarkable software that simplifies operational effectiveness and keeps customers in control of their businesses. Our vision is focused on meeting customer needs today and in the future.

