



SYSPRO ERP for

Discrete Manufacturing



SYSPRO[™]
Simplifying your Success



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 1600 channel and support partners. Over 15 000 licensed companies across a broad spectrum of industries in over 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.

The most integrated, uncomplicated
and effortless business software solution
for small and medium enterprises

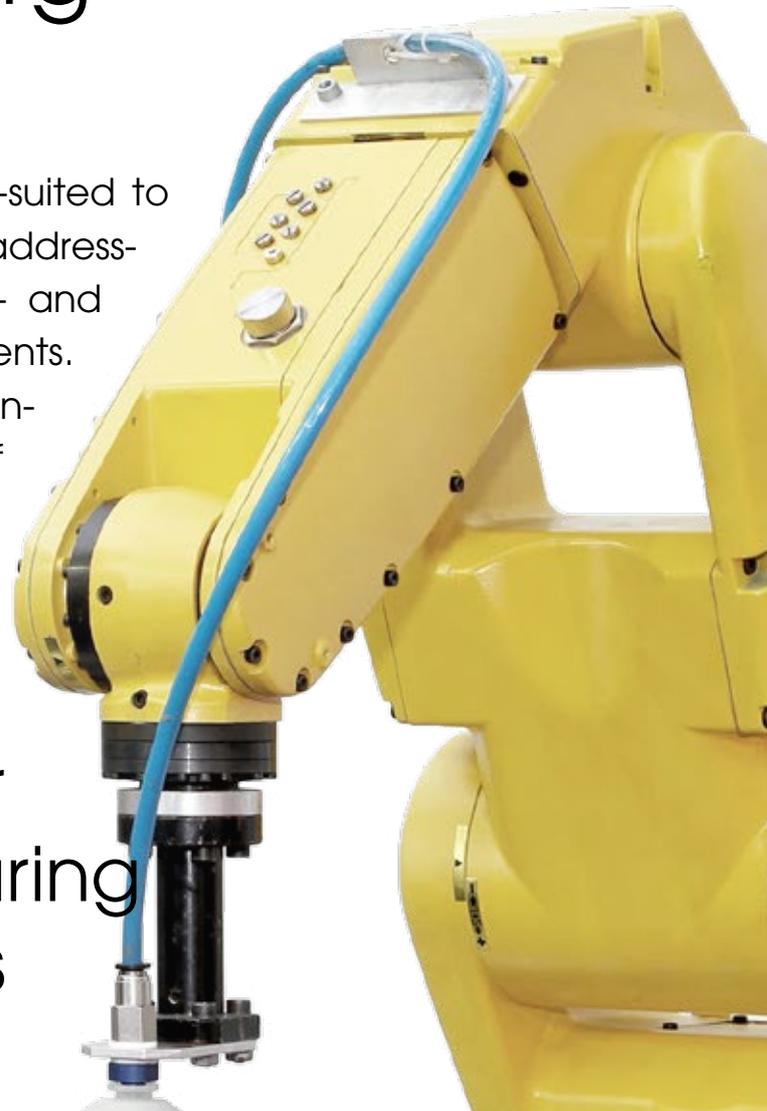


The Discrete Manufacturing Environment

SYSPRO's integrated solutions are well-suited to assisting discrete manufacturers in addressing the challenges prevalent in high- and low-variance and volume environments. Our functionality enables discrete manufacturers to achieve high levels of efficiency and profitability in the fabrication and assembly of components and finished products.

SYSPRO solutions for discrete manufacturing business challenges

- Balance inventory investment with customer service levels
- Control product design changes for batch manufacturers
- Ensure quality of raw materials and monitoring during production
- Identify and respond to seasonal demand patterns
- Manage component requirements
- Reduce forecast error
- Reduce lead times
- Synchronize supply with customer demand



Balance inventory investment with customer service level targets

Keeping adequate stock while continuing to offer superior customer service means understanding the balance of supply and demand, and maintaining the right product mix.

Through the powerful tools in the Inventory Optimization suite of solutions, SYSPRO enables you to get insight into historical demand and therefore have a better forecast of future sales, assisting you to optimize inventory levels and free up working capital without compromising your reputation as a reliable supplier in the market place.

Key elements that drive inventory across the supply chain are co-ordinated, tracked and controlled so that inventory can be optimized. Standard analysis of slow-moving, excess, active and static stocks enables targeted promotional and product rationalization programs, as well as better management of obsolete stock. Further benefits include improved warehouse utilization and fewer headaches for the procurement and production scheduling teams. The Families and Groupings and Forecasting modules enable you to minimize forecast error and manage seasonality, thereby improving order fulfillment performance. This functionality is complemented by features such as available-to-promise and various time fence indicators, which give sales and production staff a reliable view of what they can promise to customers and when.

SYSPRO's Material Requirements Planning (MRP) gives you clear visibility to the integrated effect of current and future supply and demand within the constraints set by Inventory Optimization. This visibility enables you to make better purchasing and production decisions and reduce excess and obsolete inventories. The inclusion of sources of supply and demand is configurable and various reports and related review programs enable easy identification of potential over supplies and seamless execution of suggested actions. Order policies by stock code at warehouse level enable you to implement lot-sizing rules for purchased and manufactured items.

Standard reports such as the Inventory Exception and the MRP Potential Over Supplies reports help you identify excess inventories and possible problems with your lot-sizing techniques.

In make-to-order environments, where a full material requirements planning run may not be required, features such as Advanced Trial Kitting provide full visibility to replenishment requirements for multi- or single-level jobs. The purchase order to job link enables purchased or sub-contracted materials to be receipted directly into specific jobs.

“ The robustness of the SYSPRO manufacturing solution was a key factor in the decision to go with SYSPRO.

- Michaela Higgins, Controller,
Sound Surgical Technologies
Posted by Sound Surgical
Technologies

”



Control product design changes

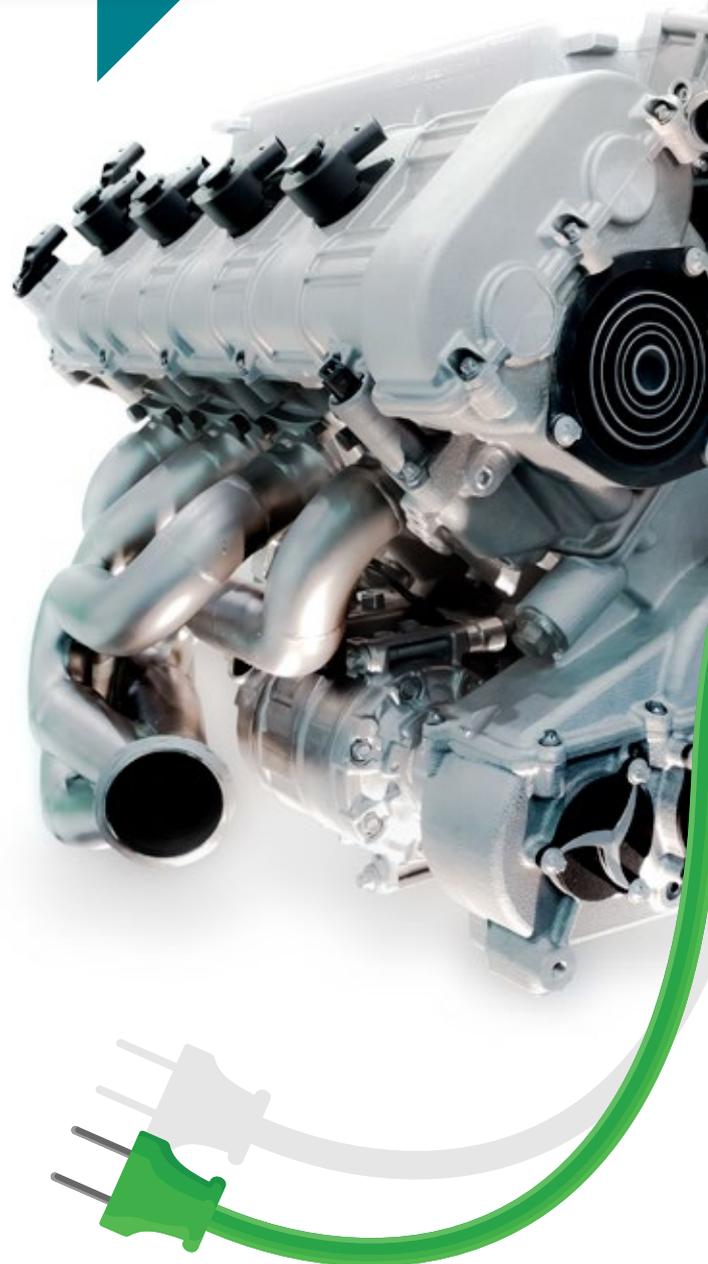
Constant innovation is one of the key factors to remaining competitive, and on-going research and development to formulate new and better products is integral to the industry.

SYSPRO's Engineering Change Control (ECC) enables you to streamline and apply strict control over your design-to-market processes by providing a rules-based electronic workflow system with full version control, security and auditable history.

ECC gives you the tools to record and track new and modified component and process changes, assess the impact of these changes on costs and associated data, and control the change routing and approval processes. ECC's queries, audit trail, history and archive facilities give you quick online access to details of prior product versions, as well as the option of reverting to the production of a prior product version. In addition, the facility to attach copies of product drawings to version and release levels provides access to visual details of revisions.

The Where-Used Query facility enables you to identify all items affected by the raising of an engineering change order for all routes identified as being under engineering change control. SYSPRO also provides a 'replace component where-used' facility that enables the quick replacement of one item with a valid substitute item, thereby streamlining formula changes.

SYSPRO's ECC, Bill of Materials, Work-in-Progress and Factory Documentation solutions enable you to implement controls to ensure that your products are manufactured under consistent processes, to the correct specifications. Single-level, multi-level, co- and by-product bills are all catered for. Flexible bill definitions accommodate complex raw material and bulk requirements to ensure precision in quantities required for intermediates, batches and packs. You can define each structure level in a bill based on absolute fixed quantities, fixed quantities per, or wet weight percentages. Precision is further enhanced by SYSPRO's allowances for high tolerances in quantity definitions, as well as the number of levels catered for in a multi-level bill.





Ensure quality of raw materials and monitoring during the production process

SYSPRO enables you to implement continuous improvement by helping you to identify problems and points of waste as they happen. Raw materials and manufactured products often vary in grade and quality so for many industries, tracking and control is essential to reduce waste, scrap and defects.

SYSPRO enables you to specify approved manufacturers for raw material supplies, and supplier performance can easily be tracked via queries and reports. In addition, SYSPRO facilitates the tracking of materials from purchase through production to customer, thereby maximizing quality control and providing you with the tools to manage product recalls, should they occur.

You can flag purchased items as requiring inspection so that during receipting, detailed records of counts, inspection, scrap, rejects and returns are recorded. Units in inspection are visible, but unavailable for use until accepted into stock. Similarly, SYSPRO Work in Progress inspection gives you the tools to inspect manufactured product quality and, depending on the results, select to receipt, scrap or re-work quantities.

Identify and respond to seasonal demand patterns

SYSPRO's Forecasting solution gives you the tools to help you forecast future demand based on seasonal, cyclical and trend demand patterns in your sales history and lost-sales data, thereby enabling you to plan your production and purchasing to meet these requirements.

A powerful Pareto analysis feature enables you to easily identify fast, slow and obsolete items in terms of sales value, gross profit, cost of sales, quantities sold or hits, so you can make decisions about which items to forecast, and the best method to use for each.

You can choose to create forecasts at stock code/warehouse level, and if the Families and Grouping solution is installed, you can aggregate your forecasts into user-defined groupings. A variety of forecast calculation methods are available, including the competition method, and the solution also provides facilities to track the forecast quality.

Additionally, you can select to manually forecast items which require market intelligence, while selecting to batch forecast all other items, and filters and adjustments can be applied to sales history to account for outliers and other abnormalities.

Multi-level analysis of product performance is available, including at stock code, warehouse, product class, supplier, planner and buyer levels, as well as at user-defined group level if the Families and Groupings solution is installed.

The approved forecast becomes the demand input to SYSPRO's Material Requirements Planning system. This gives your planners and buyers visibility to the resources and actions required to meet the demand in the short, medium and long term.



Manage component requirements

SYSPRO enables the time-phased planning and execution of both dependent and independent component replenishment, as well as the efficient management of component issues to production.

The system's component-to-operation linking facility, on both standard and non-standard product bills of material, as well as its order policy, lot sizing and dynamic lead-time functionality, ensures that automatic replenishment calculations for dependent demand satisfy quantity and date requirements. Independent demand for spares is also catered for through the use of SYSPRO's multi-level MPS and forecasting functionality. Inventory order-point indicators, such as reorder point, minimum/maximum levels and safety stock, provide the tools for other replenishment-planning approaches which may be better suited to optimizing inventory in your environment.

SYSPRO enables the quick review and execution of suggested actions for component purchasing and production, using either the Requirements Calculation or trial kitting criteria as a source. For make-to-order and engineer-to-order environments, sales order-to-job linking, purchase order-to-job linking and the bill-of-jobs features enable the automatic raising and linking of component requirements for a customer order line. Extensive purchase order and blanket purchase order functionality, as well as SYSPRO's electronic collaboration tools ensure fast and secure communication of orders to suppliers around the globe.

SYSPRO's Multi-level Trial Kitting program enables you to quickly check that you have all components required for a standard part, job or bill of jobs before issuing any materials or launching a job onto production and, if not, where shortages exist. 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 component inventory.

Where production runs are short and work-in-progress control is not required, SYSPRO's backflushing enables you to issue components used, on receipt of the parent product.

SYSPRO's Where-Used Query and Replace facilities enable seamless replacement of one component with another throughout relevant bills of material, while the Engineering Change Control module enables full version and release level management of this process if required.



Reduce forecast error

In environments where materials and product replenishment planning is largely based on demand forecasts, the forecasts must be as accurate as possible to minimize the costs associated with inaccuracies such as redundant stock and poor customer service. While forecasting is, by definition, an inexact science, its purpose is to improve the quality of predictions, and tracking the forecast error is an essential part of this process.

“

Our return on investment on SYSPRO software is phenomenal. We're handling 30% more business with the same number of people. And, there's every reason to believe that we can handle new business with the same high levels of efficiency, thanks to the integrated and scalable nature of our SYSPRO solution.

- Richard Cedrone, CEO, TriStar
Posted by TriStar

”

SYSPRO's Forecasting solution provides tools to enable you to track and evaluate your forecasts, as well as to identify the possible causes of forecast errors. These tools assist you in optimizing your forecasts to produce the best possible outcome. The Forecasting module enables the entry of manual forecasts, as well as the automatic generation of forecasts via a variety of forecast algorithms, including those that compute for trends, seasonality and cyclical events. In addition, the solution provides a competition forecasting method (also known as focus forecasting or the tournament method) which attempts to select the most suitable forecast algorithm, based on a selected error measurement and your recent SYSPRO sales history data. This allows you to compare results to determine which method is the most suitable for any particular item, whether you forecast on products at code, revision, release, or warehouse level. A tracking signal is used to indicate when the validity of the forecast might be in doubt; those items with high forecast errors are highlighted and can be reviewed and adjusted as required.

Forecast accuracy depends not only on the regular evaluation of the forecast error, but also on the integrity and nature of the source data. In SYSPRO, forecast accuracy is enhanced through the ability to automatically filter and adjust outliers, as well as to manually adjust forecast-based data for quantitative and qualitative factors. Reports and queries provide comparisons between actual sales and suggested, draft and approved forecasts.

Reduce lead times

One of the key contributors to maintaining competitive advantage in the global market place is the ability to deliver quality products to customers within their expected delivery date, in a shorter time than your competitors, and within your cost constraints. To do this, you need to be able to analyze lead time constituents and non-value-add activities, from order taking to delivery, so you can identify and eliminate waste.

SYSPRO's integrated nature gives you complete visibility across the entire supply chain, enabling the co-ordination of activities, while its powerful tools help you to monitor and improve lead-time performance. SYSPRO's e.net Solutions and import functions facilitate improved electronic collaboration with your customers and suppliers, thereby reducing the time and margin for error for activities such as order processing and the creation of customer-specified designs. Supplier performance data enables you to compare original due date with receipt date for purchased items, while the capture of customer request date at order entry time enables reporting on customer delivery performance by customer, by order line.

For build-to-order items, SYSPRO's Quotations solution enables the capture of all build details and costs, thereby enabling you to calculate realistic delivery dates. It also facilitates the quick conversion of an accepted quote into the relevant details in Work-in-Progress, Sales Orders and Purchase Orders. This reduces capture time and errors, as well as the time taken to raise the paperwork.

For stocked items, SYSPRO enables the capture of standard purchasing lead time for components, as well as the automatic calculation of manufacturing and cumulative lead times for manufactured product based on the elements of operation times in the Bill of Materials and Quotations modules.

Material and distribution requirements planning helps you identify what you need and when you need it based on standard lead times dynamically adjusted for batch size for selected sources of demand and their requirement dates. Powerful queries provide pegging and time fence information to enable effective decision-making.

Work in Progress job data provides job and operation planned and actual start and finish dates, which enables you to identify bottlenecks in production. In addition, SYSPRO Factory Scheduling provides excellent visibility of your production scheduling activities, thereby facilitating improved utilization of manufacturing resources.





Synchronize supply with customer demand

Particularly for component and material suppliers of original equipment manufacturers (OEM), synchronizing supply with customer demand is a key requirement to prevent costly line stoppages in assembly plants. This involves not only automating order processing and other processes in the supply chain, but also executing production plans using LEAN principles.

SYSPRO Blanket Sales Orders and Releases provides you with the tools to record contracts with your OEM customers and provides you with an accurate means of tracking and reconciling cumulative release quantities and converting them into sales order quantities. The module enables SYSPRO customers to easily update call-off schedules for their OEM clients, as well as reconcile the cumulative position against their OEM contracts.

Confirmed customer schedules, in turn, become an input for demand planning and, ultimately, production and purchasing requirements linked to the relevant schedule requirement dates. The Requirements Planning and Factory Scheduling modules provide you with the tools to implement LEAN principles, manage the replenishment process, and ensure that you meet your OEM contract service levels.

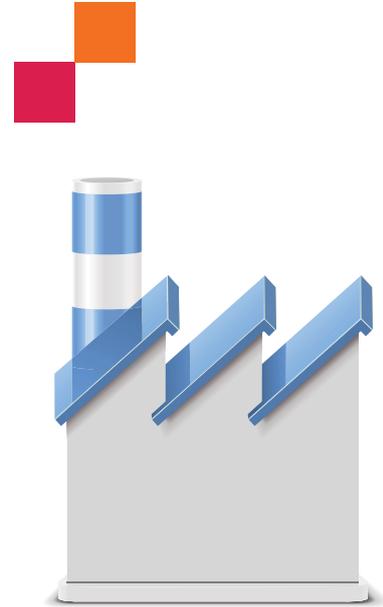
Streamlined electronic collaboration with your OEM customers is facilitated through features such as SYSPRO Workflow Services, Document Flow Manager, SYSPRO e.net Solutions, EDI, Office Automation and Messaging, fax, email and various Business-to-Business import and export functions, thus reducing response time, margin for error and penalties associated with disruption to OEM production lines.

SYSPRO for manufacturing

The 21st century manufacturer understands the need to be agile, flexible and responsive, and requires a software solution that gives them leverage to use whatever production methods are appropriate. The software also needs to provide visibility through the manufacturing chain – back to suppliers, along the production process, and up to customers. The software must also be able to integrate with other systems in the production environment. Furthermore, in the modern customer-centric world, organizations need to move from being purely transaction-focused to being more relationship-oriented, and to improve connections and communication, both internally and externally.

The challenge is how to achieve these goals in the most efficient, streamlined and cost-effective way possible. SYSPRO ERP (enterprise resource planning) software provides a fully integrated solution with a comprehensive set of tools to help manufacturers to plan, execute and control production in discrete, job shop, process or mixed-mode manufacturing environments. SYSPRO functionality improves core competencies such as:

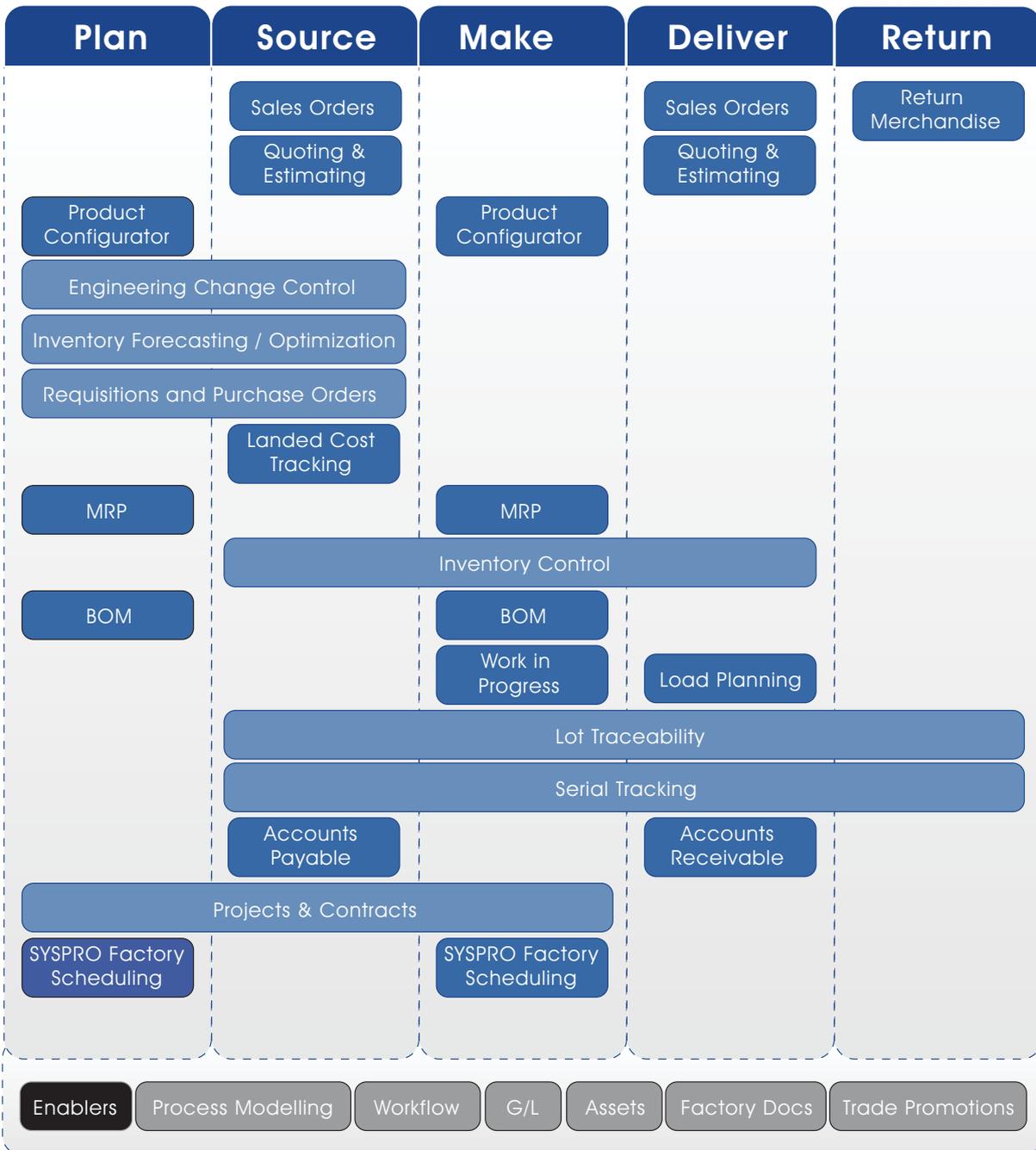
- Managing inventory levels to optimize the competing demands of availability versus cost
- Providing quotes that are accurate and keep costs under control
- Defining comprehensive bills of materials (BOMs) from simple to very complex bills
- Calculating lead and elapsed times, and order quantities
- Planning and scheduling of production
- Material requirements and capacity planning
- Managing material, labour and scrap during work in progress
- Integrating with CAD and shop-floor data collection systems
- Cost control and tracking
- Performing “what-if” modeling on material, labour and routing costs



“ Very simply, SYSPRO offered in-depth manufacturing functionality, as well as strong financial and distribution capabilities. We also like the ability of SYSPRO e.net Solutions to extend the enterprise.

- Timothy Harryman, Director of Information Systems, Osment Models
Posted by Osment Models

”



Supply Chain Framework

**Africa and the Middle East**

SYSPRO (Pty) Limited
Block A
Sunninghill Place
9 Simba Road
Sunninghill
Johannesburg
2191
South Africa
Tel: +27 (0) 11 461 1000
Fax: +27 (0) 11 807 4962
Email: info@za.syspro.com

Canada

SYSPRO Software Limited
4400 Dominion Street
Suite 215
Burnaby (Vancouver)
British Columbia
Canada
V5G 4G3
Tel: +1 (604) 451-8889
Fax: +1 (604) 451-8834
Email: info@ca.syspro.com

USA & Americas

SYSPRO Impact Software, Inc.
959 South Coast Drive, Suite 100
Costa Mesa, (Los Angeles region)
California 92626
USA
Tel: +1 (714) 437 1000
Fax: +1 (714) 437 1407
Toll free: 800 369-8649
Email: info@us.syspro.com

Asia Pacific

SYSPRO Software Pty Ltd
Suite 1102, Level 11
201 Miller Street
North Sydney NSW 2060
Australia
Tel: +61 (2) 9870 5555
Fax: +61 (2) 9929 9900
Email: info@au.syspro.com

8 Eu Tong Sen Street
#19-91
The Central
Singapore
059818

Tel: (65) 6256 1921
Fax: (65) 6256 6439
Email: info@sg.syspro.com

All enquiries:
Australia: 1300 882 311 (Local call)

UK & Europe

K3 Syspro
Baltimore House
50 Kansas Avenue
Salford
Manchester
United Kingdom
M50 2GL
Tel: +44 161 876 4498
Fax: +44 161 876 4502
Email: info@k3syspro.com



www.syspro.com

V02 Copyright © 2014 SYSPRO. All rights reserved.

All brand and product names are trademarks or registered trademarks of their respective holders. No part of this material may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without prior written permission from the publisher.