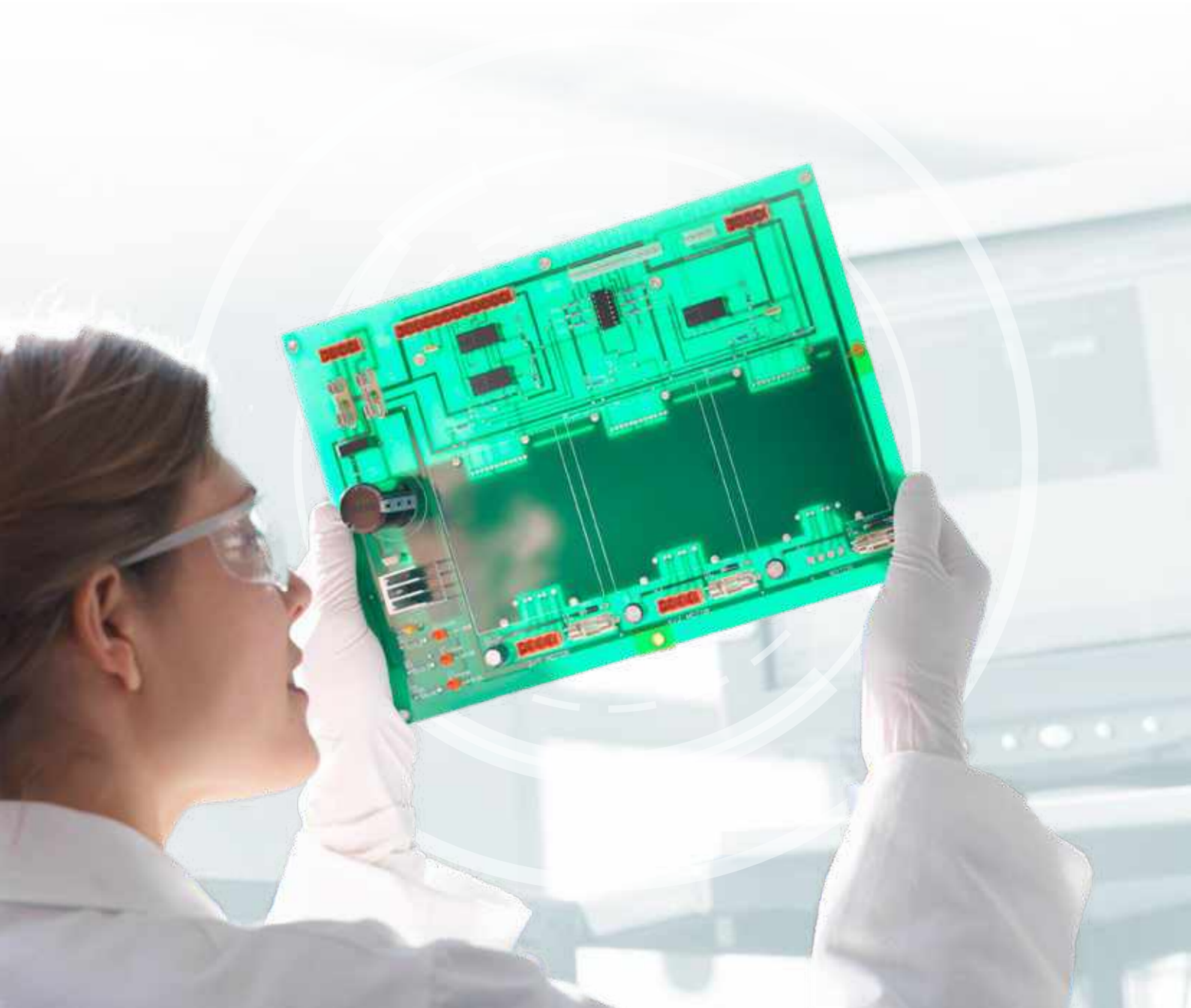




SYSPRO Switched-on ERP for Electronics Manufacturers



The Current Landscape

The global drive towards Industry 4.0 – the fourth industrial revolution – has meant that electronics manufacturers have had to prepare for shorter times-to-market, greater individualization of products and flexibility, and therefore, engineer smarter business models built around factory interconnectivity and heightened productivity.



Operational Infrastructure of an Electronics Business

As a **Manufacturer in the Electronics industry** agility and speed in getting to market are critical to meet the challenges of constant product innovation, short product life cycles, high levels of obsolete inventory, and complex supply chains. To succeed you need an ERP solution that enables automation, integration, visibility and cross communication across your entire supply chain.



Key reasons for choosing the right ERP business software:



Reduced Profit Margins

Global competition and new innovations are driving prices down. To remain in business and to remain profitable, electronics organizations need to ensure that their manufacturing processes are as cost-effective and efficient as possible.



Complex Global Supply Chain

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Service and Warranty Management

Supplier quality management is becoming more important due to the use of the extended global supply chain. The better the quality effectiveness, the lower the Warranty Reserve (a direct cost to the bottom line) that the organization holds to offset unforeseen quality problems. The post-production service hours and material costs will also be reduced. Tighter controls are needed more than ever before, requiring specialist quality personnel and a strong partnership with the supplier. This requires a very robust traceability system to reduce time to resolution of any problems.



Short Product Lifecycles with Uncertain Demand

Today, electronic products have significantly shorter lifecycles due to the speed the average consumers' preferences and tastes evolve. As a result, electronics manufacturers need to be able to introduce new products and processes quickly and efficiently to deal with economic volatility and variable demand causing fluctuations in production – consumer preference can cause spikes in demand for an individual product or company. This requires better communication between all departments, formalized processes which are tried and tested, and control measures in place to keep inventory aligned with demand.



Sustainability

More and more sustainability regulations and standards are being implemented every year, forcing manufacturers to consider the complete product lifecycle when making decisions. One of the biggest concerns when it comes to sustainability in the electronics manufacturing industry is e-waste – how to sustainably dispose of products and the impact of this on the environment once they've reached the end of their expected life cycle.



Optimize Production Capacity and Increase Efficiency with the Right ERP Solution

SYSPRO's 40 years of specialization in the electronics manufacturing sphere has enabled us to design industry-specific software to overcome the unique challenges of this industry. SYSPRO's Manufacturing Operations Management, Lot/Serial Tracking, Work-in-Progress inspections, Procurement Planning and Electronic Data Interchange (EDI) solutions are just some of the features that have made us a leader in world-class business software solutions for the Electronics industry.

Our smart solutions provide companies in the electronics industry the agility to succeed in this dynamic environment by allowing business insights to create a lens into the controllable business levers and promoting a strategy that removes internal constraints to market. The impact of this includes:

- Lower inventory levels
- More efficient and agile R&D times
- Reduction of operating expenses
- Improved delivery times
- Effective component sourcing (needs: legislative, governance, customer)
- Improved forecasting (improved integrity, traceability in achieving a synchronous landscape)
- Agility and flexibility throughout the lifecycle.


Optimize Management and Planning with Improved Visibility

Increase productivity, minimize loss and lower production costs with SYSPRO's Manufacturing Operations Management solution.

To gain the competitive edge, you must be agile at all levels of operation – without increasing costs and waste or sacrificing efficiency. Whether you use line, batch or project processes, your scheduling activities must balance competing objectives. This includes the efficient management and execution of re-scheduling activities when business priorities and plans change or unexpected events occur.

Having the capability to create and execute an achievable schedule requires a comprehensive view of your current situation and available resources, as well as the tools to perform efficient re-scheduling if necessary, production line and mixed mode environments.

SYSPRO's Manufacturing Operations Management is a powerful advanced planning and scheduling solution that empowers you to quickly create and share flexible and reliable production plans. 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 enables organizations to generate accurate schedules that consider constraints around people, machines, tooling and material. You are then able to ensure you make best use of your available capacity to deliver to customers faster and in the most cost-effective way.

Manufacturing Operations Management can help you:

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

Control Product Design Changes

Improve control over product life cycles through efficient management of design revisions.

With the large number of components in electronic products, the efficient management of design revisions is central to maintaining control over your product life cycles. SYSPRO's extensive features enhance the centralized management and control of the process, while its comprehensive security, customization and multi-lingual capabilities enable you to provide secure access to external collaborative partners around the globe.

- **Import facilities and SYSPRO e.net Solutions** facilitate improved electronic collaboration with customers for the creation of customer-specified designs, while our Contact Management System provides a central area for the recording and querying of all communications regarding collaborative activities.
- **Multi-level bills of material for designs** modelled on CAD systems are automatically updated into SYSPRO, thereby reducing double-entry and the margin for error. 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.

- **SYSPRO Engineering Change Control (ECC)** features enable the creation of user-defined Work-flows to control the product development process and ensure electronic sign-off. Transactional data is controlled through a paperless approval and authorization mechanism including ECC event triggers as defined by an organization.
- **Control over part revision** is also seamlessly handled by the Engineering Change Control (ECC) solution. ECC provides the tools to record and track revisions of products and parts for design as well as sales and replenishment purposes. ECC's queries, audit trail, history and archive facilities give quick online access to details of prior versions, as well as the option of reverting to the use of a prior version. In addition, the ability to attach copies of product design drawings to version and release levels provides access to visual details of revisions.
- **Forecasts, customer history and the ability to copy previous sales order** details into new customer orders enable users to quickly determine the correct revision and release levels for demand generation and sales purposes. The Material Requirements Planning (MRP) system provides an integrated picture of supply and demand, enabling control of whether MRP should raise suggested supplies for demand of non-current revision.
- **The integrity and reliability of product design data** and versions are strengthened through the rich functionality in SYSPRO's Inventory, Bill of Material and Engineering Change Control modules. Together they provide centralized control of and visibility into product life cycles, ensuring that all Product Lifecycle Management (PLM) participants, whether internal or external, are working collaboratively to the same specifications.

Manage Traceability and the Recall Process

Continuous improvement programs enable zero-defect initiatives and compliance, and minimize product recalls.

For compliance – whether government or customer-driven – the ability to ensure part traceability from material origins through manufacture to final destination is integral to guaranteeing products against defective materials and workmanship. SYSPRO aids the process by implementing zero-defect initiatives, thereby enabling the automation of processes that monitor product quality. The system facilitates the execution of continuous improvement programs by helping identify quality problems as they occur.

- SYSPRO facilitates the recording of traceability and quality data on materials and products from purchasing through inspection, manufacturing, manufacturing inspection, stocking and sales. This enables real-time tracking of supplier performance, quality and warranty metrics. These serial tracking and lot traceability features provide powerful queries that enable both upward and downward searches by stock code, lot number/serial number and transaction type. Flexible reporting allows for the fast extraction of trace reports.



- SYSPRO enhances the supplier selection process through features such as approved manufacturers and supplier scorecards. Supplier performance and reliability can be tracked on a number of levels, including delivery performance and performance relative to other suppliers. Purchased goods inspection implements controls over the quality of delivered raw materials, while the work-in-progress inspection facilities enable quality validation and grading of manufactured products.
- **SYSPRO Contact Management System** enables a company to create and work with 'one source of the truth' helping to overcome the challenges associated with information fragmentation and inconsistency, empowering users to improve the management and sharing of vital information about their customers, suppliers or prospects. CMS is one of the primary technology solutions for businesses to gain better control of sales, marketing and customer service information and processes.

Improve Forecast Accuracy

Minimize forecast errors by fine-tuning the balance between supply and demand .

While forecasting is, by definition, an inexact science, its purpose is to improve the accuracy of predictions and thereby enable the fine-tuning of the balance between supply and demand. In forecasting environments where product ranges and configurations are extensive, bills of material are complex and raw material and component lead times are long, improved forecast accuracy is essential to minimize inventory holding and obsolescence costs without compromising customer service or brand loyalty. Forecast accuracy depends not only on the regular evaluation of the forecast error, but also on the integrity and nature of the source data. SYSPRO provides tools to track and evaluate forecasts, as well as to identify the possible causes of forecast errors. These tools assist in optimizing forecasts to produce the best possible outcome with minimum forecast error.

- **SYSPRO Inventory Management solutions** provide a unified view of inventory, based on real-time data at each stocking location – in transit, at the finished goods warehouse, on the factory floor, expected components and raw material from suppliers, and outstanding orders from customers. This detailed real-time data is essential for effective customer service and profitable management.
- **SYSPRO's Inventory Forecasting** facilitates 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. Furthermore, SYSPRO's proxy functionality enables the forecasting of new products based on the sales history of similar superseded products which is useful in industries where product life cycles are short.

Minimize Obsolescence

Reduce inventory, obsolescent stocks and lead time to customers

Rapid innovation is critical to remaining competitive and strategies to optimize inventory without sacrificing customer service and quality are essential. SYSPRO automates and streamlines the order-to-delivery process, providing complete visibility across an integrated view of operations. The SYSPRO Inventory, Inventory Optimization and Material Requirements Planning modules provide the tools to help reduce forecast errors, manage seasonality and optimize inventories to meet customer service targets.

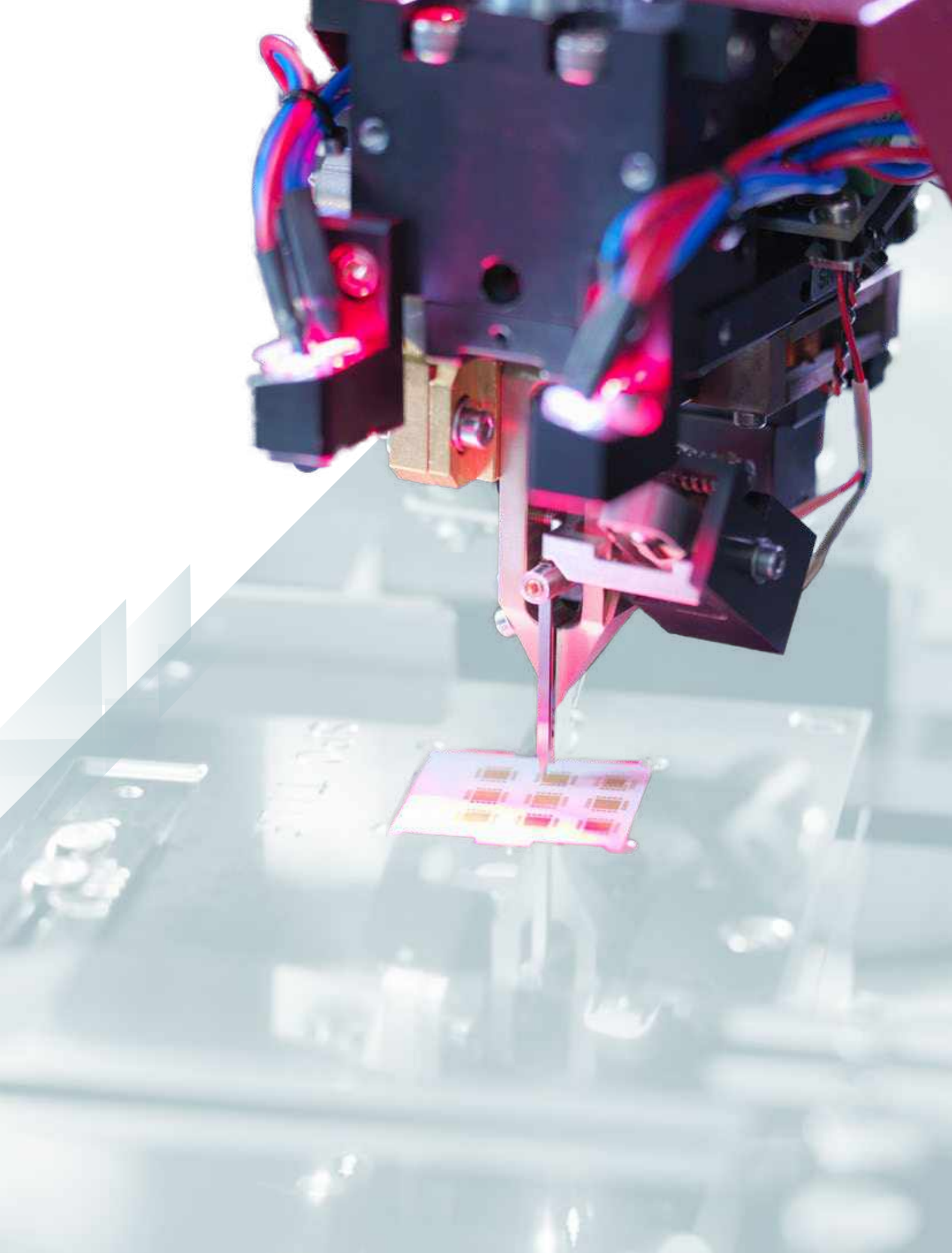
- The Inventory Optimization suite provides comprehensive tracking and analysis of forecasts, as well as slow-moving, excess, active and static stocks. Powerful features enable accurate obsolescence provisioning, product rationalization programs and targeted promotions on slow moving and end-of-life stocks.
- **Excess component, work-in-progress and finished goods inventory** is further alleviated through the use of SYSPRO's powerful forecasting and Material Requirements Planning (MRP) features. These provide a complete view of independent and dependent demand and supply, and accurate time-phased requirements with comprehensive pegging. Component-to-operation linking, along with order policy, lead time and time fence features enable accurate. Just in Time (JIT) based materials replenishment.
- **Efficient automation, management and the tracking** of product life cycles are provided through the Inventory, Bill of Materials and Engineering Change Control modules, thereby streamlining time-to-market processes. Efficient warehouse and shelf-life management is provided through SYSPRO's powerful inventory, warehouse management, lot tracking and serial tracking functionality.

Manage and Control the Return Process

Streamlined, automated processes and actions for authorizing and tracking customer returns, warranty claims and complaints.

SYSPRO enables companies to streamline and automate the processes and actions involved in authorizing and tracking customer returns, warranty claims and complaints. This in turn facilitates targeted improvement programs to help reduce the time and costs associated with such events and improve product quality.

- **The SYSPRO Return Merchandise Authorization (RMA)** module rapidly processes customer returns and the resulting corrective actions such as receipting, exchanges, cross-shipments, repairs, scrap and credits, as well as charges for returns and restocking activities. Action codes, notes and user-configured returns classifications facilitate comprehensive analysis and reporting.
- **The power of SYSPRO's returns automation** is further enhanced by its seamless integration with the system's serial tracking, lot traceability, quality and engineering change control capabilities.
- **SYSPRO Workflow Services** will facilitate the returns and complaints processing in a consistent coherent flow for all users, further reducing the time and effort associated with these activities.



Some of the Electronics Manufacturers that have Chosen SYSPRO as their ERP Solution

Gardasoft

Gardasoft Achieve Payback in Less than 12 Months with SYSPRO ERP.

Gardasoft designs and manufactures high intensity LED illuminators and high performance pulse/strobe controllers for LED lighting – providing unique solutions to the global Machine Vision, Intelligent Traffic (ANPR – Automatic Number Plate Recognition and ALPR - Automated License Plate Recognition) and Security (CCTV) markets.

The Challenges

As the company began to grow, it became more time-consuming and less effective. Information could not easily be shared and traceability, while doable, was not as efficient as it needed to be. From accounts to stock control, the new system needed to support the company to keep pace with advancements in technology and especially as businesses start to embrace Industry 4.0. The senior management team decided to look for an ERP supplier who could provide them with a single database solution across all of their departments. The company had grown to 24 employees and it was for staff to be able to have visibility of all of the processes from sales to production and delivery.

The Solution

Traceability and Certification support are vital - Gardasoft uses Printed Circuit Boards (PCBs) involving hundreds of different components. Being able to pinpoint one tiny part throughout the manufacturing process is essential. "We needed a system to manage our models. These are quite complicated and consist of lots of assemblies. SYSPRO allows us to do this. For us it is about risk management more than anything else. Recalls are expensive in terms of time and money and we want to minimise that risk by being able to trace the process and the parts."

The Outcome

Gardasoft has experienced improvements to their reporting and stock control system, a reduction in administration time, and improved efficiency in sales and order processes. They are also able to streamline across borders now as they have a site in the USA. This has saved money on administration costs which can all be merged and available on one system across admin, sales and customers. The company is currently moving ahead to gain certification to the ISO 9001:2015 standard. Having the SYSPRO system in place has helped with this process. Mr Using said: "The certification is important in terms of not just having quality management systems but being able to prove we have them. It is a way of showing we manage our business effectively and put in place best practice methodology.

We need a system that is fast and affordable. We narrowed the choice down to two or three candidates, but really we knew there was only one that fitted what we needed

Sergei Using
Supply Chain Manager
Gardasoft, Europe

The difference has been astounding. We are no longer spending a fortune on consultants and IT support just to keep the system running, like we were with Oracle. We are no longer battling our own customizations. This partnership is beyond compare.

**Jaime Ditterline,
Systems Analyst
Prudential Lighting USA.**

Prudential Lighting

Prudential finds a perfect fit with SYSPRO ERP after replacing their unreliable Tier 1 System.

For more than 60 years, Prudential Lighting has engineered and produced high-quality fluorescent luminaires in the USA. Whether it's collaborating with leading architects and lighting designers on a new treatment, or refining a classic design, Prudential is driven by innovation. Its national network of sales representatives is among the most knowledgeable and service-oriented in the lighting industry.

The Challenges

Prudential's first ERP implementation was with a very large Tier 1 ERP system. The fit was never ideal as they constantly felt like the small fish in a very large Tier 1 ERP pool. They poured a lot of money into consultation and customization fees and seldom lasted a week without a system crash or other incident requiring assistance from the consultants.

Prudential realized that the system was no longer meeting their needs and they began researching alternate ERP solutions. In addition to this, due to the variety in the catalogue and their make-to-order environment, the business required a solution to enter their orders without sorting through thousands of stock codes.

The Solution

Prudential Lighting offers a wide range of catalogued parts with a huge amount of options for every fixture. They also offer custom luminaires designed in partnership with their customers. This has led to a daunting number of stock codes. SYSPRO worked with Prudential to organize the data and help the company come up with ways to maintain counts and organize over 140,000 stock codes. Product Configurator was selected to address the make-to-order environment. Working with the implementation team, Prudential was able to set up the system, scrub and then convert data from their existing ERP into SYSPRO, implement a bar coding and handheld solution and train users in just four months.

The Outcome

The most significant result of the SYSPRO implementation is the level. Within the first week, it was apparent that the right choice had been made. There are no longer exorbitant consultant and IT support costs to keep the system running. SYSPRO allows Prudential the freedom to do business and have a system working for them rather than working to make the system function.





G&B Electronics

Traceability and quality are key in these industries and SYSPRO gives us the capability to become a trusted supplier through its serial and component tracking capability. We are now able to compete for serious, high level contracts because we can demonstrate strong control processes throughout our supply chain.

Laura McBrown - Managing Director
G&B Europe

SYSPRO Sparks Smarter Business Model for Electronics Manufacturer.

G&B Electronics began as a design and development business with low volume manufacturing capabilities. Recently, it has shifted its business model to become an electronics manufacturing business with test development and post sales, non-warranty product support services.

The Challenges

As part of the drive towards transitioning the business model from design to manufacturing, the company has had to implement new processes for dealing with warranty support, re-calibration and product re-configuration. The company's previous end of line business application was effective for design, but lacked in manufacturing functionality. The business required greater data collection capability, Advanced Planning and Scheduling (APS), and wanted to integrate its financial package into its manufacturing execution system.

The Solution

A real benefit of G&B's SYSPRO implementation is the time the company has saved on creating part numbers. The company is using SYSPRO's standard processes for creating part numbers and accelerating this by integrating the ERP solution with DataSwitch data manipulation and integration tool. As part of the drive towards transitioning the business model from design to manufacturing, the company has had to implement new processes for dealing with warranty support, re-calibration and product re-configuration. SYSPRO's Serial Number Tracking functionality is making it possible for the business to effectively track the movement of all manufactured items through the production line and the wider supply chain.



The Outcome

G&B has been able to reduce the time it used to take to create part numbers from up to 10 days at a time to just a day, and sometimes hours. Furthermore, because the process is automated, the business is also benefitting from more accurate data, and reducing the risk of human error. SYSPRO's traceability solution has also enabled the business to further segment itself into the aerospace and defense markets.

About SYSPRO

Established in 1978, SYSPRO is an industry-built Enterprise Resource Planning (ERP) solution designed to simplify business complexity for manufacturers and distributors worldwide. SYSPRO provides an end-to-end business solution for optimized cost control, streamlined business processes, improved productivity and real-time data analysis for comprehensive reporting and decision-making. SYSPRO is highly scalable and can be deployed either in the cloud, on-premise, or accessed via any mobile device.

What sets SYSPRO apart is an unwavering, sustained focus on the manufacturing and distribution sectors. Combined with a practical approach to technology and a passionate commitment to simplifying business processes, SYSPRO dedicates itself to the success of its partners and customers alike. SYSPRO applies its resources to the advancement and improvement of the complex and changing needs of its customers.

Recognized as a leader in customer service, SYSPRO has one of the highest customer retention rates in the industry. SYSPRO's intuitive product features, business intelligence capabilities and easy deployment methodology are unmatched in the marketplace. The depth of software functionality and targeted industry knowledge make SYSPRO an excellent fit for a number of select manufacturing and distribution industries. Find out how an industry-specific SYSPRO ERP solution can help you overcome the challenges of the Electronics manufacturing industry and ensure your growth and profitability well into the future.

For more information, visit www.syspro.com.



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