Production management system
Why Prosys?
Managing plant operations has become ever more complex. It demands extreme efficiency and high quality production, while remaining flexible to changes. Required response times are becoming extremely short. At the same time production management and process control are becoming digitized and networked. Job tickets and logging on paper is disappearing. Unfortunately, enterprise resource planning systems do not cover the actual production in necessary detail. That is why we developed the Prosys Production Management System to be implemented as a standalone system or as an integrated system with your enterprise resource planning system. We have designed Prosys™ to improve production efficiency and quality, enhance communications and reduce waste.

Monitor and react
- Machines state
- Work in process
- Single production events
- Produced copies or running meters
- Waste volume and classification
- Production speed
- Production time allocation
- Downtime classification
- Fault diagnostics
- Personnel involvement and comments

Report and analyze performance based on
- Machine and/or process
- Job number
- Job parameter
- Time
- Personnel
- Raw material
- Process factor
- Environmental factor

Easy to implement and scalable
Prosys™ can be adapted to single and multiple machines in an enterprise, regardless of the original machine supplier. Easy implementation means simple process modeling, installation, configuring and training. There is virtually no risk for the customer and the benefits of the system start right away, not months later. The system is actively updated and improved utilizing input from customers and partners. One of our most interesting and beneficial areas of development is our joint co-operation with several machine manufacturers resulting in automating the make-ready process and improved machine diagnostics. Another course of development is linking with enterprise resource planning systems and improving the data sharing.

System based on standards
Behind Prosys™ is a complete product model defining the exact roles of each module and their interaction. The product model is founded on official or de facto industry standards, such as Windows, Excel, DCOM, OPC, SQL, ODBC, JDBC, TCP/IP, HTTP, HTML, Email and SMS. All data is stored into a standard database making it available in real time and off line. With Prosys™ the information is no longer stored in different systems, memos and peoples minds.
Who will benefit from using Prosys™?

Machine operators are the basic users of the software, and are also at the forefront of the system development. For example, at the beginning of the data acquisition phase the software’s graphical user interface contains only a few keys and fields. Machine-specific process data acquisition is the main issue, so the number of commands have been minimized and moved to the background so as not to disrupt the process professional.

In the office there is a completely different, although no less demanding, user group than on the plant floor. The plant manager, the sales manager, the production manager, and the quality manager expect specific data and concise reports. From the large amount of raw data one should be able to extract the essential information and easily distribute it to all who require it. On-line production measurements and reports give managers accurate information in real time with less paperwork. Access to critical shop-floor information by PC, PDA and mobile phone enables rapid decision-making.

Plant Manager, CEO and CFO

- ROI for production machinery
- Cost control
- Incentive plan
- Long term trends
- Direct information from operators

Sales Manager and Estimator

- Accurate pricing based on factual information and history
- Faster reaction and better customer service
- Information about customer jobs and performance according to estimate
- Knowledge of efficiency of production process and any problems
- Knowledge of raw materials, as well another job related parameters and their effects on production time and costs

Production Manager, Planner and Developer and Maintenance Manager

- On-line machinery, job, event and operator comment monitoring
- Calculation of production key figures, such as production speed, good copies, waste, run time, make-ready time, etc.
- Downtime classification, fault diagnostics and benchmarking of machinery
- Throughput times and bottleneck identification
- Tracking production goals
- Tracking raw material and environmental factor effects on production performance
- Knowledge of production personnel
- Utilize corporate knowledge regarding production processes

Quality Manager

- Track waste generation and volume
- Measure quality actions
- Part of quality system and certificate program
- Part of ecological program

Operator

- Monitor personnel and machine performance
- Alert maintenance personnel and management
- Share knowledge throughout organization
- Track raw material and environmental factor effects
- Render exact data for maintenance personnel, management and machine suppliers

“When we decided to expand our plant and product range by acquiring a new generation production machine, we wanted to secure our investment and start-up phase with a production management system. The Prosys system has given us accurate information, and with great satisfaction we have found that we have met our performance predictions and anticipated ROI (return on investment). During the start-up phase we could clearly identify areas that needed improvement. Various statistics and reports are now part of our continuous production monitoring and development activity. As a plant manager I value the fact that it is now easier than before to report to the top management of our company.”

Plant Manager

“Prosys gives us real data, and the more accurate picture of production facilitates management. I know exactly what is happening and I can study different production parameters and their affect upon production quantity, quality and turn-around time. Sensor-based measurements produce exact data about machine operations. System operator comments are usually difficult to measure, but are very useful knowledge for the plant. Using the data collected with Prosys, we have created optimal scheduling. From the reports I can also follow long-term trends and make sure we are moving in the right direction. Prosys produces statistics and reports that have increased the efficiency of our planning and production meetings at the plant.”

Production Manager

“Prosys was easy to learn because of its intuitive graphical user interface (GUI), which I use both by mouse and keyboard. There are no complex commands in the GUI, and everything is tightly related to the production machine and process. Many pieces of the information formerly collected manually are now collected automatically. It is good that I can record into the system my own comments such as fault descriptions and instructions for the next shift. I can follow my productivity and keep track of any problems that occur in production.”

Operator
Prosys modules

Prosys Interactive™ - server software, which optimizes management and distribution of information over a network of Prosys Analyzer and Prosys Meter installations with multiple users. Prosys Interactive provides browser user interfaces and a programming interface for connecting to other software. Prosys Interactive is designed for use in TCP/IP networks, especially for multifunctional LANs operating in an Internet environment. Prosys Interactive can send email via corporate email servers and SMS messages via a GSM modem or phone attached to a PC running Prosys Interactive.

Prosys GateLink™ is the interface software most often used with Prosys Interactive for direct communication with Heidelberg ManagementGate. Heidelberg ManagementGate communication takes place via a defined, open interface, whose description is available from Heidelberg. Prosys GateLink stores production information directly from Heidelberg ManagementGate into a database accessible through the reporting, communication and other features of Prosys Interactive.

Prosys Xreport™ is a customizable data reporting and analysis package to be used with Prosys Analyzer and MS Excel. Prosys Xreport is based on customizable templates with the capability to add and run macros as is common in MS Excel.

Prosys Analyzer™ is a production system analysis software that acquires data and automatically calculates run time rates, fault rates and the duration and proportion of different events. Prosys Analyzer efficiently pinpoints fundamental factors of production in real time. It is designed to support both interactive and automated data acquisition for a wide variety of event processes. Modeling and logging events of process actors is made easy through the graphic user interface and automation interface. ProsysAnalyzer also offers a set of tools to calculate statistics and to draw charts for concise data presentation. Preset feature enables users to download and select scheduled jobs and their parameters from ERP systems into Prosys. Reportset feature makes it possible to upload and report actual production data from Prosys into ERP systems.

Prosys Meter™ is a real time software and hardware module for Prosys Analyzer for runtime, downtime, good copy and waste management. Prosys Meter allows simple, quick input into Prosys Analyzer through its programming interface. Prosys Meter contains both Windows software and hard real time software run on PLC. Track feature calculates and presents statistics for individual jobs. Shifts feature allows users to start and end shifts enabling calculation and reporting of shift performance statistics.

Prosys Touch™ is a real time software and hardware module that brings industrial touch screen functionality to the Prosys Analyzer and Prosys Meter system.

Prosys Signal™ software provides UPS (uninterrupted power supply) support to Prosys Analyzer, Prosys Meter and Prosys Interactive when used with UPS hardware.

About Prosys

Since 1995, Prosys PMS Ltd has delivered industrial software to companies around the globe. The Prosys product family, consisting of Prosys Analyzer™, Prosys Interactive™ and Prosys Sentrol, is a complete production management system, linking automation and enterprise resource planning in plant manufacturing. Building its extensive experience in this field, Prosys also offers software solution services, designing and implementing customized and tailored

Prosys Sentrol™

Prosys Sentrol is a totally new method to develop supervisory control and data acquisition applications with excellent performance. The Prosys Sentrol framework and component library is based on an object oriented programming language, which ensures fast application development. Most of the features of SCADA applications are programmed into the components. Our OPC client components provide ready-made access to a wide range of industrial devices and machines. Prosys Sentrol is also an ideal tool for machine builders because the framework and component library decreases development costs and enables faster time to market.