

Manufacturing

FOOD & BEVERAGE | PULP & PAPER | CHEMICAL MANUFACTURING

In order to achieve lean, competitive and sustainable manufacturing environments, businesses must optimize plant and supply chain performance to drive down costs and increase production. There are however ongoing challenges such as:

- Reducing materials & energy wastage
- Achieving continuous 'perfect orders'
- Maintaining supply chain visibility
- Controlling performance & quality variations
- Managing plant assets and Overall Equipment Effectiveness
- Meeting regulatory compliance
- Ensuring safety standards
- Managing quality control and KPI standards
- Achieving tight 'time to market' schedules

Automsoft Solutions for Manufacturing

Automsoft's Intelligent Manufacturing Platform is designed to increase manufacturing performance by enabling rapid optimization of shop-floor processes and product output. Today, Automsoft works with some of the world's leading names in food and beverage, pulp and paper and chemical processing sectors. Automsoft's manufacturing solutions include:

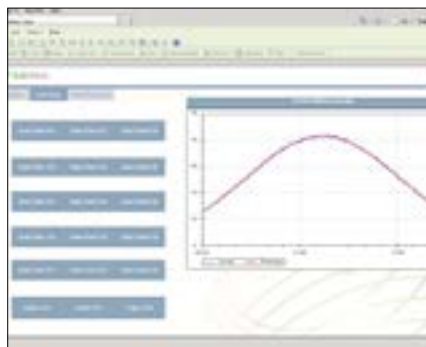


RAPID™

Automsoft's RAPID™ technology is a robust and powerful distributed data historian with high-speed data capture and analysis, empowering plant-wide manufacturing intelligence and production optimization.

RAPID™ stores and serves vast levels of real-time manufacturing data sourced from plant-wide systems such as Lab Information Systems, Distributed Control Systems, Batch Execution Systems, Process Logic Controllers, Supervisory Control and Data Acquisition systems, and Warehouse Control Systems. Key RAPID™ features include:

- **Centralized enterprise data management:** RAPID™ interfaces with open and proprietary control system databases & IT applications for fast retrieval, archival and distribution of multiple data types (time-series process data, batch data (S88) and binary formats (e.g. documents and spreadsheets). Production data feeds and reports can be distributed from RAPID's centralized database on to other business management systems such as ERP.
- **Batch process optimization:** RAPID™ interfaces with batch systems to retrieve all batch data (recipes, batch activities and alarms & events) and enables technicians to conduct individual batch analysis, batch to batch comparisons, batch exception and golden batch reporting in order to identify optimum batch recipes for future scheduling.
- **Plant asset monitoring & OEE analysis:** RAPID™ enables quick task automation, remote asset monitoring, maintenance scheduling and alert setting that extend an asset's lifespan, assesses equipment effectiveness and mitigates against production downtime.
- **Centralized report management:** Production and Quality Control managers can quickly access and share a wealth of reports (ad-hoc/automated) and utilize RAPID's powerful analysis tools to enable better understanding and optimization of manufacturing recipes, equipment, procedures, operations, process cells and batch processes.
- **Alarm & exception management:** Alert and exception setting tools within RAPID™ mean Production Managers can be alerted quickly to run-time batch and production issues enabling quick problem resolution, cause-analysis and ongoing process adjustment.
- **Audit traceability, user authentication & digital signatures:** RAPID™ enables manufacturers to record all user interactions with plant processes ensuring regulatory compliance in terms of accountability, traceability and security



Optional RAPID™ functional add-ons include: Batch Reporting, Audit Reporting, Server High Availability, Network High Availability, Data Replication, OPC Caching & Redundancy.

Automsoft Technology Highlights

- > QA & regulatory compliance
- > ASHRE, ANSI & ISO compliant
- > High-speed data compression & storage
- > Application & data independent
- > Web services/SOA
- > OPC Compliant (HDA, DA, UA, A&E)
- > Multiple data source compatibility (ODBC, OPC, OLE/DB, ADO, NET, SQLServer, Oracle and web services)
- > Centralized data management & visibility
- > Complex data interrogation – Calculation Engine, Excel add-in
- > Extensible information model
- > Alarm & event management
- > Extensive visualization tools – graphics & animated instrumentation
- > Integrated security, & user authentication & audit traceability
- > Server & network high availability
- > Comprehensive backup, OPC caching & redundancy
- > Anytime, anywhere access
- > Open web services data distribution

About Automsoft

Automsoft is a technology pioneer. In 2001, Automsoft launched the world's fastest and highest performing data historian, completely re-thinking conventions on technology and the management of process data. Today, Automsoft's RAPID™ database technology is at the forefront in complex asset management, and provides the data backbone for managing the massive volume of data generated by sensor networks, control systems and devices across industries from smart grid to medical sensing technology. Automsoft is headquartered in the Republic of Ireland.

For more information, please visit <http://www.automsoft.com>.



rapidVision™

rapidVision™ is a 'thin' web-based authoring system ideal for large and geographically dispersed manufacturing operations, providing users with comprehensive supply chain visibility. Production operators can quickly access a dashboard of enterprise process intelligence, analysis and visualization tools via a browser within the supply chain. rapidVision's features include:

• **Web-based enterprise dashboards:** rapidVision™ provides a single point of access to a manufacturing plant's entire process data network. Authorized users from shop-floor operators to boardroom executives can quickly log on and view process outputs or perform analysis on a departmental or enterprise level.

• **Advanced process visualization:** rapidVision's online dashboard interface and tools allow users to transform numeric process data points into process mimics which dynamically update in run-time enabling production managers to remotely view process equipment outputs from across a plant network.

• **Distributed plant asset monitoring:** Production managers can view real-time dashboards of dispersed asset and process performance from across the manufacturing plant and within hazardous (chemicals), sterile or geographically remote locations.

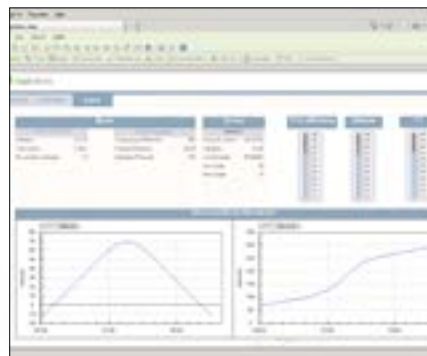
• **Centralized web-services data exchange:** rapidVision™ interfaces with all manufacturing legacy control systems using its Report Service interface, which remotely requests and retrieves data via web-based data exchange retaining network integrity, simplifying aggregation and enhancing enterprise data visibility.

• **Calculation Engine & predictive modeling:** rapidVision's Calculation Engine enables users to perform powerful historic process and batch data analysis and modeling to reveal optimum conditions that ensure profitable, high-quality and efficient plant output.

Automsoft

Key Statistics

- > Volume range from minute (< 10 Megabytes) to massive (> 10 Petabytes)
- > Ingestion rate 3 million events per second
- > Read rate 4.4 million events per second



Automsoft Benefits for Manufacturing

- **Achieve consistent 'perfect order' output** by optimizing quality control, batch analysis and KPI performance.
- **Reduce manufacturing costs** by optimizing processes to reduce operating costs, materials wastage and workflow inefficiencies.
- **Increase capacity and yield & reduce lead-times** by refining batch processes and identifying golden batch formulas for leaner, faster output.
- **Extend plant asset longevity** and increase uptime through ongoing asset monitoring, OEE analysis and maintenance scheduling.
- **Secure staff, product and customer safety** through rigorous production monitoring and automation, quality control and user authentication measures.
- **Standardize plant-wide data visibility and access** from any network or web-enabled PC.
- **Achieve strategic collaboration** from shop-floor to boardroom through common data visibility and fast business system integration.
- **Increase ROI** of existing manufacturing assets and IT applications through open and seamless data and application interfacing and asset management features.

Automsoft®

EMEA

Dublin, Ireland
Tel: + 353 1 449 1100
Fax: + 353 1 449 1199

North America

Princeton, NJ
Tel: +1 650 585 4338

Email: info@automsoft.com
Support: support@automsoft.com
Web: www.automsoft.com