process solutions

Driving your operational efficiency

Leveraging proven technologies and domain expertise, our innovative process control solutions can help you deliver results for a sustainable advantage.

"The vision is one of an information-centric management culture where every employee can combine trade craft and science in every bottle we make. Our process is complex with many interacting variables. This new technology has simplified the learning curve for new employees, making them more effective and proactive in their jobs. Ultimately we foresee use of the new technology fundamental in our journey toward Lean / Six Sigma manufacturing."

John Gallo, *Vice President*
Gallo Glass Company

In today's competitive business environment, companies in hybrid and continuous process industries face complex challenges. The demand to improve business operations, increase profitability and meet a growing list of internal and external compliance metrics has never been greater—all while facing unprecedented pressure to reduce costs and operate at peak levels of efficiency.

Your process control solution is a key part of your ability to not only meet these challenges, but to use them to gain a competitive advantage for your business. To s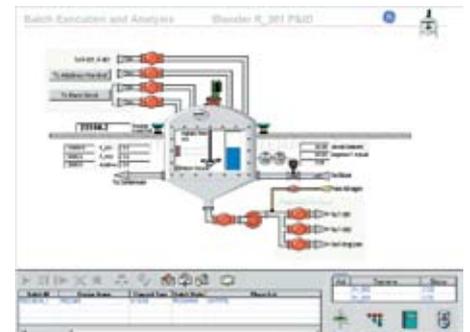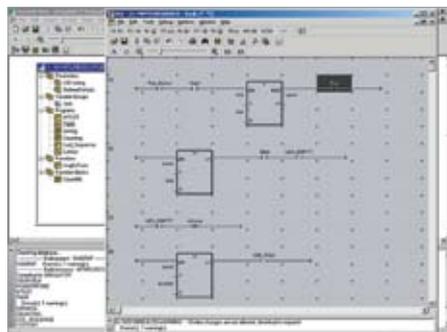ucceed, you need a partner who understands and supports your business objectives. One who can help you to implement a better, safer process solution without jeopardizing your daily operations. One who understands the day-to-day pressures you face and delivers a solution that is tailored to help you overcome your challenges.

GE Intelligent Platforms is that partner. With our proven track record of success, contemporary technologies, in-depth industry experience and worldwide network of service and support expertise, we are changing what's possible in process.

"By migrating our design to the PACSystems RX7i Hot Standby CPU Redundancy solution, we achieved a tremendous improvement in system performance."

Stephen Altman, *Control System Product Engineer*
Alstom Power

Powerful
process control

Our integrated suite of proven process solutions enables the precise control and information you need to optimize your operational performance, and improve the safety, quality and consistency of your production.

Proficy Process Systems

Proficy Process Systems is our state-of-the-art, scalable, fully integrated system that leverages the latest hardware and software technologies for complete process automation and control. Whether your business has continuous or batch-oriented process control needs, Proficy Process Systems delivers maximum scalability, openness and performance. Based on contemporary, yet well-proven technologies, Proficy Process Systems combines the power of traditional DCS systems with the flexibility, freedom and affordability of a PLC-based approach.

PAC8000 SafetyNet

You can securely address your functional safety needs with PAC8000 SafetyNet, our proven SIL 2 certified safety system certified by TÜV Rheinland. SafetyNet incorporates the latest design techniques to achieve compliance with IEC 61508 and

IEC 61511, and it is rugged, reliable and open. Providing maximum protection and reliability, SafetyNet has been used worldwide in many different process applications such as power generation, gas plants, chemical and petrochemical industries, pipelines and all sectors of the oil and gas industries.

8000 Process I/O

Through our 2008 acquisition of 8000 Process I/O from MTL Technologies, we now offer a complete line of general purpose I/O as well as intrinsically safe I/O designed for mounting in Division 2 with wiring to devices in Zone 1 environments. Long known as a supplier of process I/O to several top OEMs, 8000 I/O is the de facto standard for process I/O. It is designed and built for the rugged environments typically found in process and can withstand temperature extremes of -40°C to +70°C and vibrations of 5G and shocks of 30G, and meet the stringent ISA G3 specification for corrosion resistance.

Proficy Batch Execution and Analysis

Proficy Batch Execution is one of the most powerful and feature-rich batch automation solutions on the market today. Featuring a fully graphical and straightforward application development environment, Batch Execution delivers complete data collection, robust batch management, clear process visualization, and powerful supervisory control capabilities. Proficy Batch Analysis provides the tools to perform detailed analysis of your batches, compare between batches, and help you clearly identify how to consistently achieve the "golden batch."

Changing what's possible in Process

To overcome today's challenges, it takes a revolutionary process control solution like Proficy Process Systems to help you improve quality, flexibility and productivity—throughout your process and throughout your business.

We're delivering the results your business demands, the experience your challenges require, the freedom you've been missing and the contemporary technology you've been waiting for.

Results

Regardless of your industry, your business is based on delivering results. Proficy Process Systems helps you deliver real results across your operations, your plant and your enterprise.

Optimize your operational performance
Optimizing performance means maximizing your assets and reducing costs, getting finished goods out the door more quickly and finding hidden capacity. Proficy Process Systems helps you achieve all this and more with the information you need to make better decisions.

Gain visibility into your operations
Proficy Process Systems provides the control and transparency you need to deliver value and to strengthen your customer relationships. With role-based views and manager access to real-time and historical views of macro-level data, you can effectively monitor key performance indicators.

Maximize your uptime and productivity
Building flexibility and responsiveness into your operations, Proficy Process Systems enables you to take less time making changes and more time making products. And you can achieve a lower total cost of ownership because there's only one system to learn and maintain.

Experience

To deliver results, you need an automation partner that knows your industry, your challenges, and, most of all, how to provide effective solutions to your customers.

Go with a proven partner with time-tested solutions
Combining award-winning technology and industry domain expertise with Six Sigma methodologies, GE has a long successful track record helping today's most successful organizations, including some of the world's largest water/wastewater facilities, one in every top ten pharmaceutical companies, major consumer packaged goods facilities, food and beverage plants, and more.

Rely on our global network of domain experts
Combining in-house domain expertise through hundreds of highly qualified system engineers around the world, we offer installation, support and training where and when you need it most.

Freedom

In the past, control systems required you to change your business according to their technology. With our process systems, you have the freedom to design your system as you see fit.

Take control

Based on open standards, Proficy Process Systems puts you in control. You have freedom from the constraints of traditional DCS systems and the freedom to configure your system to meet your needs.

Design the strategy that meets your needs

Proficy Process Systems provides freedom in designing and creating your control strategies using our standard library of function blocks or creating your own. And with our industry-leading HMI visualization technologies, you can create whatever screens and displays you need to enable your operators to run your operations at top efficiency.

You also get the flexibility of a modular system. Automate only what you need—from one area to your entire facility. Add additional consoles or workstations or controllers. Add logic or extra data processing power. Our system is extremely scalable, which enables you to expand according to your business needs.

Contemporary Solution

To compete successfully, you need an automation solution that is built from today's technology, with a vision that allows you to move effortlessly forward to the technologies of tomorrow.

Build with the best

With the latest versions of our proven software and hardware, open connectivity to instruments and I/O devices, and open Fieldbus standards, Proficy Process Systems can solve your greatest challenges. With one integrated system, you can leverage unparalleled flexibility with our multi-disciplined PACSystems controllers and attain unprecedented enterprise-wide visibility with our HMI/SCADA and Historian technologies up through our Operations Management suite.

Simplify development and maintenance

With its robust function block library, you can reuse objects within your system, saving time and work while embedding your intellectual property into the application. The system also features a state-of-the-art alarm strategy that bridges hardware and software technologies for optimum performance. The result is a detailed sequence of events that allows you to effectively address issues going forward.

Proficy Process Systems Delivers

RESULTS
→ Better performance and efficiency
→ Closed loop control from sensors to business systems
→ Lower Total Cost of Ownership

EXPERIENCE
→ Expertise serving your industry
→ High quality, local support
→ Proven, award-winning process control technologies

FREEDOM
→ Based on open standards
→ Scalable to meet your specific requirements
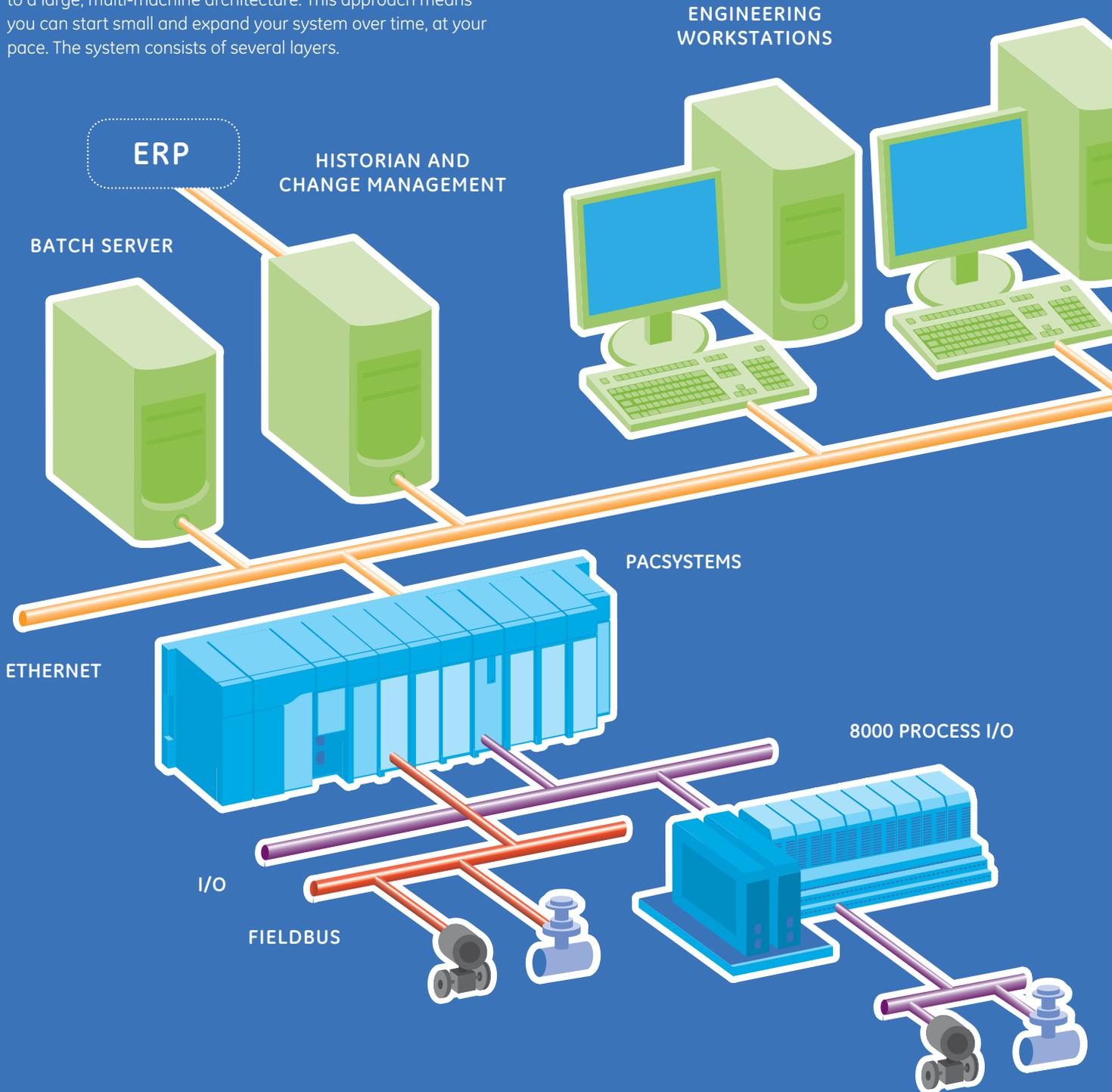→ Enables flexible control strategy development

CONTEMPORARY TECHNOLOGY
→ Combines the best of DCS and PLC control
→ Based on our latest hardware and software
→ Inherent Proficy Operations Management software

For more information about GE Process Solutions please visit www.ge-ip.com/process

Architecture

The Proficy Process Systems architecture is designed to provide a modular and expandable system to meet your most demanding process control needs. Proficy Process Systems can uniquely range from a small, one-machine architecture to a large, multi-machine architecture. This approach means you can start small and expand your system over time, at your pace. The system consists of several layers.

ENGINEERING WORKSTATIONS

ERP

HISTORIAN AND CHANGE MANAGEMENT

BATCH SERVER

PACSYSTEMS
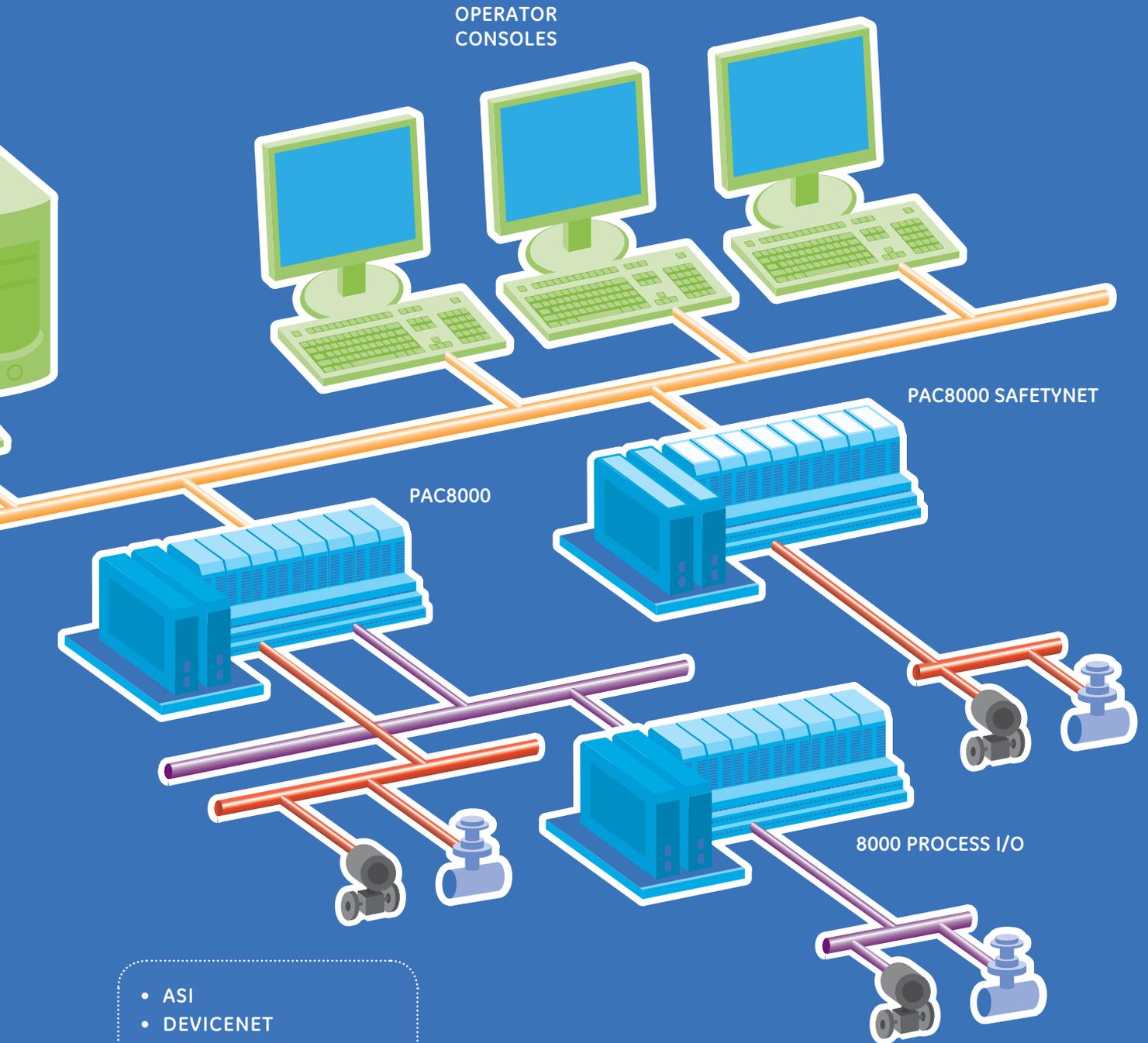
ETHERNET

8000 PROCESS I/O

I/O

FIELDBUS

OPERATOR CONSOLES

PAC8000 SAFETYNET

PAC8000

8000 PROCESS I/O

- ASI
- DEVICENET
- ETHERNET
- FOUNDATION FIELDBUS
- GENIUS
- HART
- PACSYSTEMS I/O
- PROFIBUS DP/PA
- VERSAMAX

GE Intelligent Platforms Contact Information

Americas: **1 800 433 2682** or **1 434 978 5100**
Global regional phone numbers are listed by location on our web site at **www.ge-ip.com/contact**

www.ge-ip.com/process

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