



# Migration Solutions

## Control System Modernization – Pulp-Paper Industry

As a professional in the pulp and paper industry, you understand the tremendous impact automation technologies can have on the success or failure of your business. That's why you chose the Series Six™ controller from GE Fanuc. But times have changed, technology has evolved at a remarkable pace, and now more than ever, you're being asked to do more with less. To remain competitive, you must achieve greater efficiency, increase output and enhance flexibility... and you must do so in less time, with fewer people and a smaller budget. It's a daunting task, but not if you have the right technology in place. That's where we come in.

Introducing the PACSystems™ Control Platform from GE Fanuc – a new breed of controller that will help you to extend the life of your existing equipment, boost the productivity of your plant and – most importantly – improve the bottom line of your business. PACSystems allows you to share process and production data throughout your company, improve documentation with integrated tools and decrease downtime via built-in diagnostics and online trouble-shooting. You can also use the PACSystems to interface your existing control system to other devices and production controllers, thereby increasing production coordination.

In short, a PACSystems solution can help to your cost of operation and maintenance, improve your ability to squeeze every ounce of efficiency and profitability from your existing capital equipment and enhance the overall capabilities of your plant. Best of all, we have a seamless migration path and some great incentive programs that will make moving from a Series Six PLC to a PACSystems fast, easy and affordable.

### Productivity

A critical component of enabling you to do more with less is empowering you to work more efficiently and more effectively. PACSystems delivers a diverse array of productivity-enhancing benefits, including:

- **Reduce total cost of operation & maintenance**

With the ability to store documentation directly on the controller, maintenance engineers will have the information they need right at their fingertips. And with online monitoring, troubleshooting and diagnostics, you can more easily conduct preventative maintenance and reduce costly system shutdowns.

- **Streamline production processes**

PACSystems enables you to integrate several components of your production system for increased production efficiencies and throughput. Your operator interface and information systems, for example, can exchange information with the PACSystems controller on the bacplane, simplifying and accelerating communication processes. You can also consolidate several control systems (and several potential points of failure), thereby decreasing maintenance costs by freeing up dollars being spent on maintaining spare parts.

- **Gain true manufacturing insight**

The PACSystems family of controllers features a high-speed communication network built on reflective memory technology, allowing you to collect process information, create reports and share that information with users and other systems throughout your plant without taxing the Central Processing Unit. (The entire process uses Control Memory Xchange, putting absolutely no overhead on the control processor.)

### Performance

When it comes to performance, GE Fanuc's PACSystems is in a class by itself. Empowering you to take your production processes farther, the PACSystems delivers:

- **Accelerated production capabilities using existing equipment**

With PACSystems technology, you can get zero-overhead interface through the high-speed Control Memory Xchange communications. This allows all components of your control system and process to operate at speeds up to 2x faster than you are running today. With this increase in data communication speeds, you can run more product through your existing mills and dramatically improve the output of the automation investments you've already made.

- **Faster throughput for better performance**

Speed improvements of up to 70%. VME64 backplane delivering up to 4x the bandwidth of existing VME-based systems for faster I/O throughput. 10Mb of fully configurable user defined memory.

- **Enhanced speed & superior scalability**

The backplane is four times faster than the Series Six, yet supports Series 90™ and 3rd party modules. As a result, you can take advantage of the advanced capabilities of the PACSystems while still leveraging modules you're using now within your production environment.



## Openness

The days of using proprietary technologies are over. Tremendous cost savings can be achieved by moving toward a more open technology environment – from leveraging COTS technologies to sharing information across multiple layers of technology throughout the plant. With the PACSystems, you'll be able to:

- **"Future-proof" your plant**

Open technologies and open connectivity means you'll not be locked-in to the solutions of one vendor. Basing your control systems on PACSystems technology means that you're free to use best-of-breed components from other vendors plus you can upgrade without disruption to the rest of your system. Flexible communication options enable the PACSystems solution to easily leverage Ethernet, Profibus™, DeviceNet™, High-Speed Control Memory Xchange and others. Furthermore, you can also connect PACSystems to a variety of other devices, including such popular DCS systems as DeltaV, Bailey, Honeywell and more.

- **Improve decision-making**

The expanded communication capabilities of the PACSystems allow you to seamlessly connect with upstream information systems – enabling you and your staff to consolidate production information and gain better visibility into what's happening on the plant floor. As a result, your team will be empowered to make faster, better-informed production decisions based upon real-time information.

- **Simplify troubleshooting**

The PACSystems provides users with web access to machine and process information. This enables you to conduct non-invasive system monitoring for ad-hoc crisis evaluation as well as regular system maintenance. Since these activities can now be conducted remotely, on-site manpower needs – as well as downtime – can be reduced dramatically.

## Conclusion:

As technologies and customer demands evolve, so too should your production capabilities. There's no doubt that your Series Six has served you well over the years, but the world of industrial automation has advanced so much that controllers today are capable of doing so much more. And, as a result, so are you.

The PACSystems is a powerful, open, secure control solution that can take your business to the next level without taking a great deal of time, effort or expense. We've designed the solution to work in unison with your existing automation infrastructure, extending the functionality of your plant and expanding your capabilities as a pulp & paper producer. GE Fanuc is ready to help you make

## Migration

If you're like most manufacturers, you take an "if it ain't broke, don't fix it" view of system upgrades. But it has never been timelier, more necessary or more critical to the long-term health of your business to move to a more powerful, more flexible automation technology. That's why we've made migrating to the PACSystems easy, inexpensive and trouble-free. Through our migration program, you can:

- **Migrate at your own pace**

With the PACSystems controller, you can leave your existing I/O in place and bring your new PACSystems online in parallel – leaving it running in "passive" mode to test the new control logic. When you've fully tested the new controller and you're comfortable that it's functioning to your specifications, you can gradually phase out your old controller. No disruption in processes, very minimal downtime, no stress.

- **Leverage our expertise**

When you work with GE, you're working with a company of unparalleled global experience and expertise. The GE Fanuc Professional Services team has domain expertise to convert your system cost effectively and with minimal production downtime. So, whether you do it yourself or call in the pros, GE has a way for you to move forward with confidence.

- **Optimize your plant**

As you're migrating to the latest technology, it's also an excellent opportunity to evaluate your overall production processes and identify areas where – with minimal effort and expense – you can make a dramatic impact on your day-to-day operations. The PACSystems controller features many options and configurations, and we can help you to design and configure the right one for your migration... one that will protect the investments you've already made while simultaneously enhancing your capabilities for tomorrow.

## Risk Management

Avoiding risk – be it physical or financial – is a key concern for any business in any industry. At GE Fanuc, we offer several solutions that will help you to keep your employees and your bottom-line free from potentially disastrous situations. Through a combination of hardware and software solutions, we can help you to:

- **Improve safety & security**

Unauthorized control program changes and access to control systems can cause system downtime, or worse, severe safety issues. GE Fanuc can help you to protect your control systems with integrated tools that have robust, username/password-based security, audit trails, automatic program comparators and check-in/check-out security.

- **Avoid "obsolescence by inactivity"**

All too often, a manufacturer loses ground to a competitor because his/her company failed to keep pace with technology. Customer needs change, businesses evolve and your plant needs to move right along with it. If your production capabilities lack the agility to keep up with the times, you run the risk of getting left behind. With the PACSystems platform, however, you'll have the power and openness you'll need to deal with whatever the future brings your way.

- **Remove barriers to success**

Thanks to the robust technology, the seamless migration program and the experience and expertise of the GE Fanuc team, moving your control platform to PACSystems technology is a simple decision.

the move to the power of PACSystems. We have trade-in programs for your existing Series Six (and third party) hardware that will make the already appealing switch even more compelling, plus we can help you to identify what choices are right for you and your business.

For more information, visit [www.gefanuc.com](http://www.gefanuc.com) or contact your local GE Fanuc Sales Office or Authorized distributor.

**PACSystems: What would you do with a little more control?**

### GE Fanuc Automation Information Centers

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1- 800-GE FANUC  
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(352) 727979-1

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### Additional Resources

For more information, please visit the GE Fanuc web site at:

[www.gefanuc.com](http://www.gefanuc.com)

