When paper giant Weyerhaeuser Corporation’s Pine Hill plant required enhanced process control, they chose ABB’s Industrial IT technology. It enables them to have a robust, reliable system for their 24/7 operation, and provides the right information to the right people when it’s needed. This gives Pine Hill the ability to optimize their processes by making sound decisions that are based on reliable long-term trends and immediate, real-time data.

Background
Weyerhaeuser Corporation’s had a good, long-term relationship with ABB. In 2003, their Pine Hill, Alabama pulp & paper operation was one of their first mills to utilize the Industrial IT technology.

Ease of Installation
Weyerhaeuser’s Process Control Engineer Eric Fleming describes the installation: “Installation went well. We had a very good startup - conception phase, getting the quotations, all the way to learning the process – went very smoothly. “The operators took to it well. Training went very smoothly. We were up-to-speed a lot quicker than we expected. That goes back to good training from ABB and the nature of the system.”

Engineering for Maximum Performance
Fleming again, on engineering benefits: “From a process engineering standpoint, it gives me the opportunity to do a lot more things - because it is flexible and powerful. Maintenance and troubleshooting (are) a lot
easier on this system than on some of the others we’ve put in. There’s a lot more diagnostics available to us.”

**Continuous Productivity Improvement**
Pulp Mill Assistant Superintendent Doug McCarty likes the speed of the new system: “It’s exciting. It’s really refreshing to see people wanting to do things (with the new system) because it’s easier. You can see results much quicker.”

McCarty’s also satisfied with early, promising results from Autocook, the advanced pulp & paper control package from ABB. At Pine Hill, Autocook’s main function is to control the Kraft digester’s yield & production: “We’ve been able to get live data. Autocook is an open product – our people can tune it & work on it – it’s not a magic black box that only ABB can look at. That’s been of tremendous value to us. We’ve made tuning changes and modifications to Autocook without having to wait. That’s been extremely valuable.”

Fleming’s also pleased with Autocook. “We’re still in the tuning phase, but so far it’s working well” Fleming said. “As controls engineer, it’s my job to make what we have run better, and more efficiently. With our previous system, my hands were tied. With the new ABB system, I have a lot more tools to accomplish my job.”

**Reducing Time to Decision and Action**
According to Pulp Mill Superintendent Chuck Neese, the system offers critical market advantages. “We can free up operators to do other jobs. It’s an excellent tool for optimizing the operation. Those are the kind of things that you’ve got to do to survive in the world now.”

Fleming again: “The combination of openness and availability of process information to anyone, whether its controls people, maintenance, operations, process engineering, has cut down on process diagnosis, process troubleshooting. And it’s given us a greater ability to do optimization work.”

**Integrating Information for Improved Visibility**
“We take the data now from the ABB system & run it through a process historian database” McCarty told us. “It helps a lot on troubleshooting, in identifying opportunities for control and some procedural changes and things like that. We’ve migrated our two systems together, to pass data to a mill-wide information system to display to everyone. We find that the integration works well, it’s robust. What that does is give everyone information at their fingertips to make critical operations decisions in real-time, and also (the ability to look) back over the past 30 days, to find out what we did well and what we can improve on. The ABB system feeds information to our central repository and gives everyone the ability to make sound decisions.”

Neese added: “Because we’ve downsized, I don’t have as much time as I did in the past to go to the control room. Now I can sit in my office and monitor the digester operation. There’s a lot more information available in the ABB system and it’s certainly made my job easier.”

**Proven Solutions, Industry Knowledge and Experience**
“ABB has a very good pulp & paper group,” McCarty told us. “They’ve been in this business a long time. We’ve had other ABB products on our paper machines before. They’re sound systems, they work well. The knowledgeable people & the support are there. When we chose ABB, we knew it was going to be fine.”

Harner said: “Look at every industry - the things that were the norm five, six years ago – and the competitors … we would never have thought some of them would have fallen out or gotten weak like they have. ABB appears to be getting stronger, or to have held their ground in a pretty tough industry. We chose the one we thought was the best long-term solution - that would be here in the long-term. ABB is one of the few that can handle a big pulp & paper project. I’m comfortable that we’re OK with ABB from that perspective.”
Protecting Your Investment through Evolution
Neese again: “Without a doubt the Industrial IT system has allowed us to protect our investment. I can see that we’ll be able to improve on the operation we have, simply because it’ll enable us to do more.”

“We’re adding on to an existing Bailey system in our power plant. We decided to put the same (backward compatible) hardware on that one that we put on this (latest) project in our pulp mill. It’s not old and there’s nothing wrong with it, but we’re integrating the new products from ABB in to this (previous) system so we’ll have some standardization” McCarty added.

The Future
Fleming again: “We’ve had some very good success. We’ve got a power utilization system on our powerhouse that’s saving us money. Our confidence level’s high. Now I’d like to see - a further marriage, if you will – between Weyerhaeuser Pine Hill and ABB, now that we have our base, initial system of hardware in place. I mean, some people buy a sports car and only go 30 miles an hour – well, you’re not using near the capability that’s there! I would like to see basically, everything here, controls-wise, have “ABB” stamped on it, and both of us reaping the benefits of the investment.”

For more information on evolution of ABB open control systems, contact your local ABB representative or log on to: www.abb.com/controlsystems.

For more information on how ABB’s Industrial IT technology can be employed to solve your pulp and paper control issues, visit us at: www.abb.com/pulpandpaper.