

Proficiency Plant Applications

Delivering clear insight into your operations, Proficiency Plant Applications helps you run your plant better to run your business better.

KEY TECHNICAL BENEFITS

Open and Layered architecture

Modular applications built on the same data model

Solutions scale to fit small and large needs

Event detection and business modeling

Broad operations support

SPC alarming and analytics

Proficiency Plant Applications features a unique approach to digitizing production operations by creating a unified, easy-to-configure “virtual plant” that provides unprecedented levels of analysis, reporting and insight throughout your operations.

By digitizing your production processes, Plant Applications allows you to gain a clear and very detailed perspective of how your products are being produced. It leverages the data being collected by any process historian and provides in-depth analysis and reporting of that information—not just by time, but by the specific events taking place throughout your operation.

It also provides integrated web-based reports, key performance indicators (KPIs) and notification services available with all Plant Applications modules—a complete solution for making real-time decisions throughout your plant.

CORE MODULES

Plant Applications offers a core set of scalable modules focused on the most critical aspects of your production—designed for a rapid return on existing technology investments:

- **Efficiency** – Tracking and monitoring of performance
- **Quality** – Product and process quality analysis and control
- **Production** – Production

schedule execution and product genealogy tracking and reporting
→ **Batch Analysis** – Batch trending, analysis and reporting

Efficiency enables you to monitor and control performance with a comprehensive view of factors such as OEE, equipment downtime, waste and production quantity. You can also associate each downtime event with a specific cause on a real-time basis, calculate

| Start Time | End Time | Duration | Location | Fault | Category |
|------------------------|-----------------------|----------|----------|------------------------|---------------------|
| 12/12/2007 2:42:10 PM | 12/12/2007 2:50:41 PM | 8.52 | Mach04 | E Stop 2 Button Pushed | External Weather |
| 12/12/2007 2:42:10 PM | 12/12/2007 2:45:29 PM | 3.65 | Mach04 | E Stop 2 Button Pushed | External Weather |
| 12/12/2007 2:45:49 PM | 12/12/2007 2:50:41 PM | 4.87 | Mach04 | Machine Tuned Off | Scheduled After Hoc |
| 12/12/2007 2:12:58 PM | 12/12/2007 2:16:37 PM | 3.65 | Mach04 | Access Door 2 Open | Machine Adjustm |
| 12/12/2007 2:06:53 PM | 12/12/2007 2:08:06 PM | 1.22 | Mach04 | Drain Blocked | Operational Holdst |
| 12/12/2007 2:00:48 PM | 12/12/2007 2:03:14 PM | 2.43 | Mach04 | Access Door 1 Open | Operational Changed |
| 12/12/2007 1:54:43 PM | 12/12/2007 1:58:22 PM | 3.65 | Mach04 | Holder 1 Disengaged | Operational Changed |
| 12/12/2007 1:51:04 PM | 12/12/2007 1:52:17 PM | 1.22 | Mach04 | Motion Halted | External Blocked |
| 12/12/2007 1:27:87 PM | 12/12/2007 1:38:16 PM | 7.30 | Mach04 | No Power | External Blocked |
| 12/12/2007 1:12:05 PM | 12/12/2007 1:18:15 PM | 6.17 | Mach04 | Blocked | External Blocked |
| 12/12/2007 1:08:51 PM | 12/12/2007 1:10:18 PM | 1.48 | Mach04 | Blocked | External Blocked |
| 12/12/2007 1:05:37 PM | 12/12/2007 1:07:39 PM | 2.03 | Mach04 | Blocked | External Blocked |
| 12/12/2007 1:02:23 PM | 12/12/2007 1:05:00 PM | 2.62 | Mach04 | Blocked | External Blocked |
| 12/12/2007 12:45:45 PM | 12/12/2007 1:02:31 PM | 8.44 | Mach04 | Blocked | External Blocked |

Date/Time Entry

No Time: []

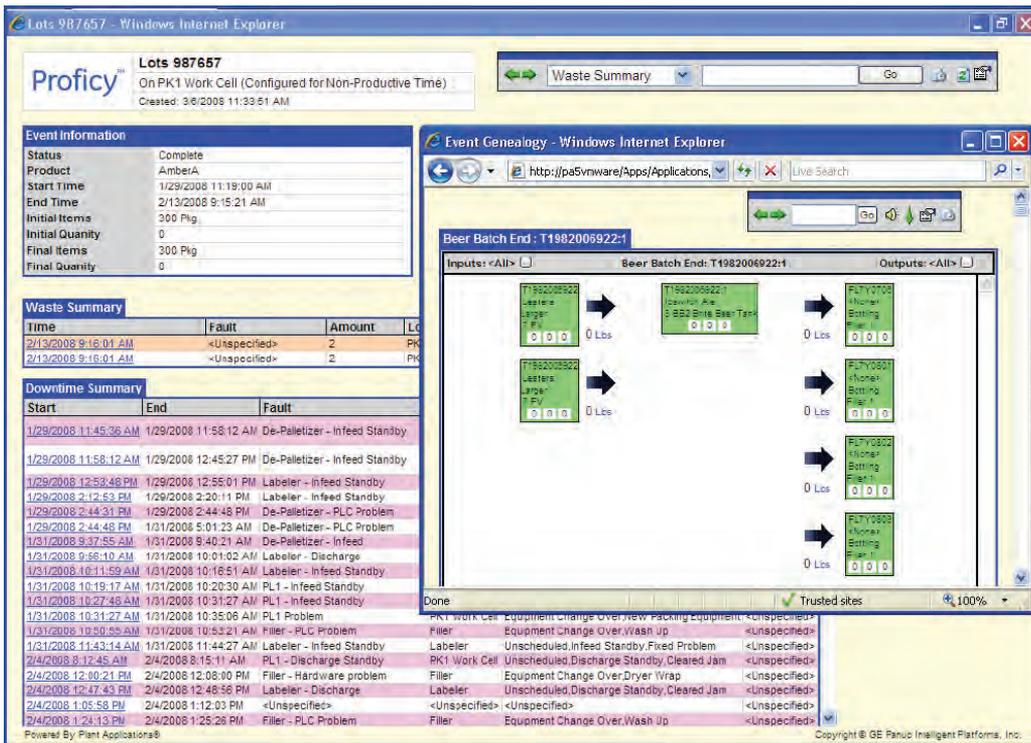
Month: 12 | Day: 12 | Year: 2007

Hour: 2 | Minute: 45 | Second: 49

Wednesday, December 12, 2007 2:45:49 PM

Grid Actions: Insert Record | Go to Date | Hide Confirmed | Build Advanced Filter | Duration Filter | 1 Minute | Change Size Mode

Plant Applications puts the information you need at your fingertips, allowing you to make informed decisions in the plant and in the office.



A key component of the Production module, product genealogy allows you to trace a product throughout every step of the manufacturing process and identify exactly what materials and quality characteristics it contains. This allows you to control the flow of product between equipment and manage in-process inventories in real time—enabling you to close the gap between orders and production.

Plant Applications delivers powerful analytical and reporting capabilities, tracking genealogy, quality and operating performance across a site or across a business.

important KPIs and create ad-hoc performance reports that can be shared throughout the organization via the web.

Quality allows you to capture the specifications of your ideal product run and re-create it consistently throughout your entire production—reducing product waste, scrap and overruns and virtually eliminating quality-related product returns.

Quality allows you to capture and summarize manufacturing and quality data in the context of production events such as batch, lot, item, serial number, time period and more. You can then apply product specifications and recipes to that data and alarm against any out-of-spec conditions the moment they occur. If a batch or run is flawed, the module allows you to isolate exactly which products have been impacted to greatly reduce waste.

Production provides insight into how products actually flow through your operations. It is the ideal tool for creating genealogy reports as well as making scheduling changes to reduce excess inventory.

Production seamlessly ties together plant operations with customers and internal business systems, including ERP, as well as between plant processes. It provides a “scoreboard” for your operators, which identifies the components of the product being produced and indicates when a particular order is scheduled for completion. Information such as inventory, production, schedule and genealogy can then be shared across the web for a real-time look into your production process.

Batch Analysis presents a comprehensive picture of your batch operations in the context of your overall manufacturing facility—allowing you to increase the overall quality and consistency of products and better understand and control variation.

With our unique layered applications approach and interface to several commercially available batch execution systems, Batch Analysis is a great fit for both new and existing systems. When combined with the rest of the Plant Applications solution, additional capabilities, including genealogy tracking, quality and production, can be combined to provide a powerful and comprehensive solution that delivers results. ●

“ Proficy Plant Applications enables us to effectively identify and monitor all areas of our manufacturing for inefficiencies, perform root cause analyses, compile historical data summaries, schedule reports, and control OEE. ”

Jose Marrero Diaz
Latin American & Puerto Rico Region
IT Director/Team Leader, Pfizer
(Control Engineering, “Building Manufacturing Efficiency”
February 2008 issue)