

Power Generation Information Manager (PGIM)



Information is a key asset of all businesses. To achieve a sustainable competitive advantage, utilities must be able to adapt quickly to change. Reduced time to decision and action is critical for improving quality and productivity. This makes the timely collection, transformation and distribution of reliable information a significant issue. In today's business environment, one of the barriers to increased productivity is aggregating data from a myriad of disparate sources, transforming it into meaningful information, and presenting it to operations, maintenance, engineering, and management in the context most meaningful to them.

Historical, process and business data is collected from available sources and stored securely. The data is transformed into meaningful information, which is presented to each decision maker in a manner that is easy to understand. This provides support at every level in the organization to improve efficiency and profitability.



A True Decision-Taking Tool

Power Generation Information Manager (PGIM) offers a company-wide system architecture that performs these functions:

- Collecting, archiving and consolidating data from production facilities, control systems, and commercial systems.
- Conducting remote diagnostics on numerous plant components.
- Visualizing and analyzing process parameters with a convenient user interface.
- Making data available to other evaluating applications (e.g. for performance calculation, operation schedule optimization, EXCEL reporting).
- Delivering process parameters, status variables and counter readings to maintenance and financial systems.

PGIM operates on a distributed, open **client/server** architecture.

The various elements of the system can run on Microsoft Windows operating system.

PGIM is a product of ABB's Industrial^{IT} family, integrated in System 800xA and designed for long-term protection of asset investment.

System Structure

The PGIM **Scanners** collect process data from lower-level control systems, PLCs, or other recording systems.

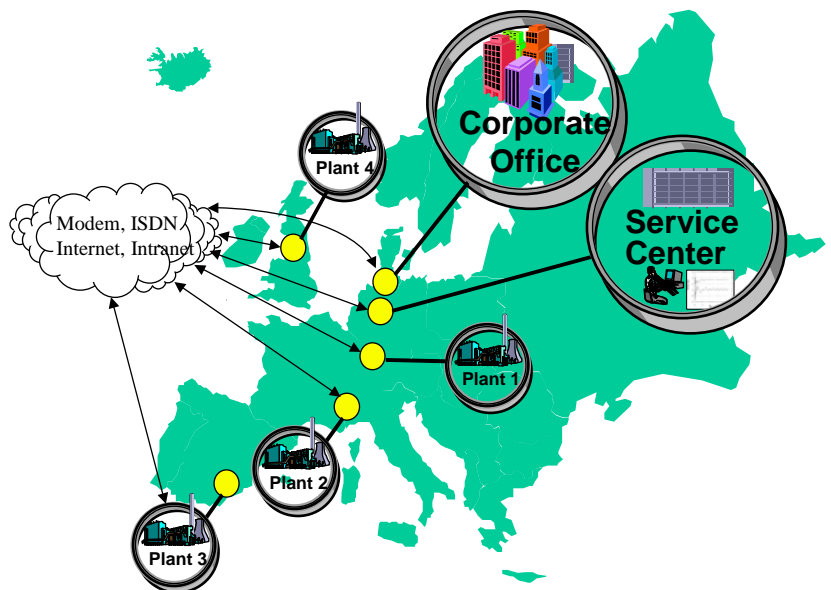
The PGIM **Server** polls the data and stores information, such as:

- Signal descriptions.
- Current and historical values.
- Messages.
- Detailed status information coming from subordinate systems in a process database.

All this is accomplished on a **millisecond basis** over a period of several years.

The PGIM **Clients** provide an advanced user interface. Clients retrieve process data from databases, and then offer comprehensive functions for evaluating process status information.

PIMS provides a flexible and scalable structure suitable for building any type of solution; from



single computer configurations to large-scale, distributed cross-plant systems.

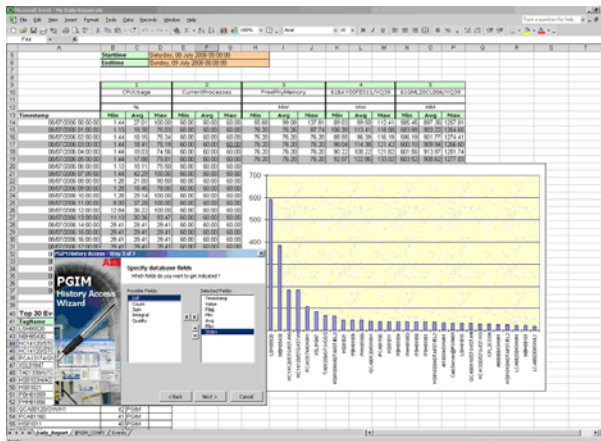
Clients can connect to any connected PIMS server. Protection and access rights are formulated in an **access protection concept**, which defines several **access levels** and **signal-specific rights**.

The system is **fail-safe** thanks to a **redundant design** database with **buffered** control system connections. The special design of the PC hardware further enhances the level of safety.

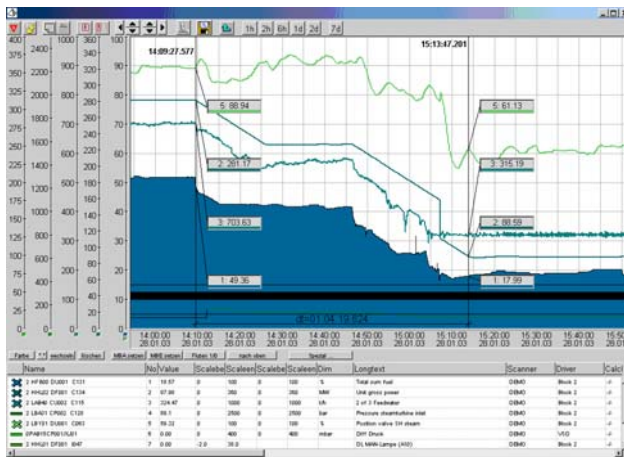
The SignalExplorer is a centralized utility designed for quick and responsive **configuration**. An intuitive layout allows you to easily create customized trend displays, dynamic graphical reports, and comprehensive data calculations.

Excel add-ins for reporting purposes enable immediate or programmed initiation of hourly, shift-specific, daily, monthly or yearly reports.

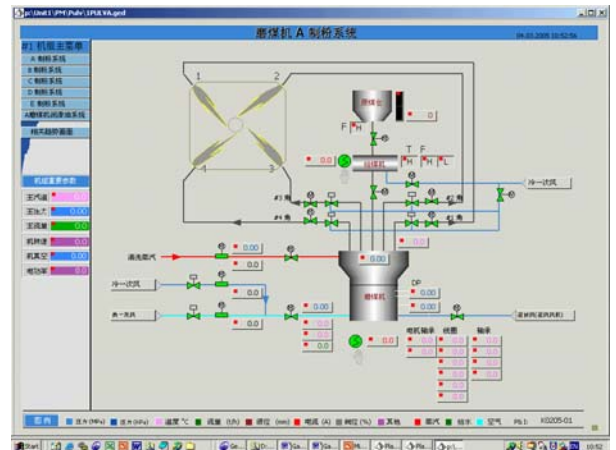
In addition, balance and maintenance reports can be generated in a familiar Excel environment. Data from any connected site can be combined and presented in spreadsheet format.



Another powerful feature is **performance-based trend representation**. You can integrate an unlimited number of signals quickly with tools that automate scaling, legends and database functions. Display average, maximum, minimum, differential and integral values. A user-friendly development environment supports simple configuration procedures.



Create **High-performance graphic displays** to support efficient engineering processes. Logically arranged graphic displays can clearly present both process parameters and calculated values.



Technical calculation tools are available to perform basic arithmetic functions, water/steam chart calculations and other common functions. These tools include a variety of both standardized and prepared performance calculation modules.

Numerous **flexible interfaces** enable distributed data collection using most industry standards. Open interfaces are available in the form of OLE/OPC/SQL and native C-DLL APIs.

PGIM provides a **Thin-Web Client** to access all relevant information of the PGIM server by standardized web services. The Thin Web Client can read all configurations made for the normal PGIM clients. It supports graphics, trends, reports and all Event Management functions. **No extra extra software** needs to be installed on your computers.

