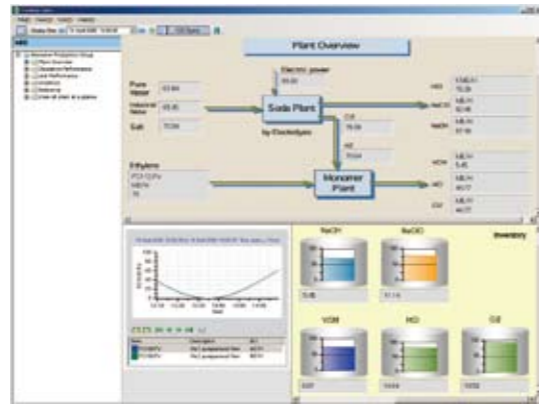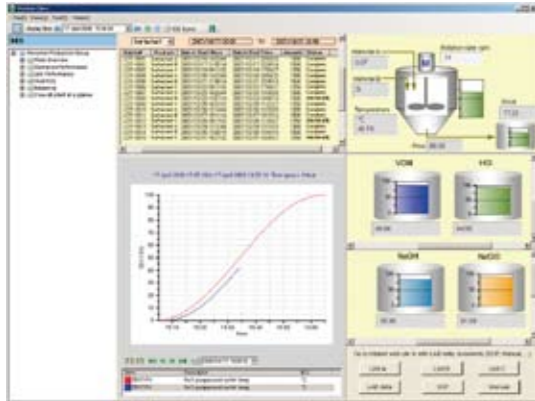Display of factory operational status countrywide

Display of operational status and product stock at a chemical plant

Display of operational status at a batch plant

azbil

PREXION

Manufacturing Information

Management System

Azbil Corporation
Advanced Automation Company
Yamatake Corporation changed its name to Azbil Corporation on April 1, 2012.

1-12-2 Kawana, Fujisawa
Kanagawa 251-8522 Japan
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PREXION™ : fast visualization of plant operation performance

PREXION accurately indicate the operational performance of a plant or factory and provides an information environment in which operational information can be used freely and flexibly.
PREXION visualizes the operational performance (quality, cost, base unit, yield, energy efficiency, and more).

PREXION is a plant information management system that automatically collects process data, both periodically and on an event basis, from various control systems and monitoring systems, and stores that data over an extended period.
Plant managers, administrative staff, engineers, operators, and maintenance staff can easily used process data collected by PREXION for efficient work. As a result, the people will accurately take quick decision making so that they can rapidly recognize operational performance, unit performance, and so on.

Reduced manufacturing costs
- Decision support for operational changes, based on yield, base unit of energy usage, catalyst deterioration, and the like.

Stable quality
- Process analysis for process modeling, in order to estimate quality data in real time
- Operational analysis, such as comparison with past response patterns

Efficient result management
- Automatic creation of shift reports, daily reports, weekly reports, and monthly reports
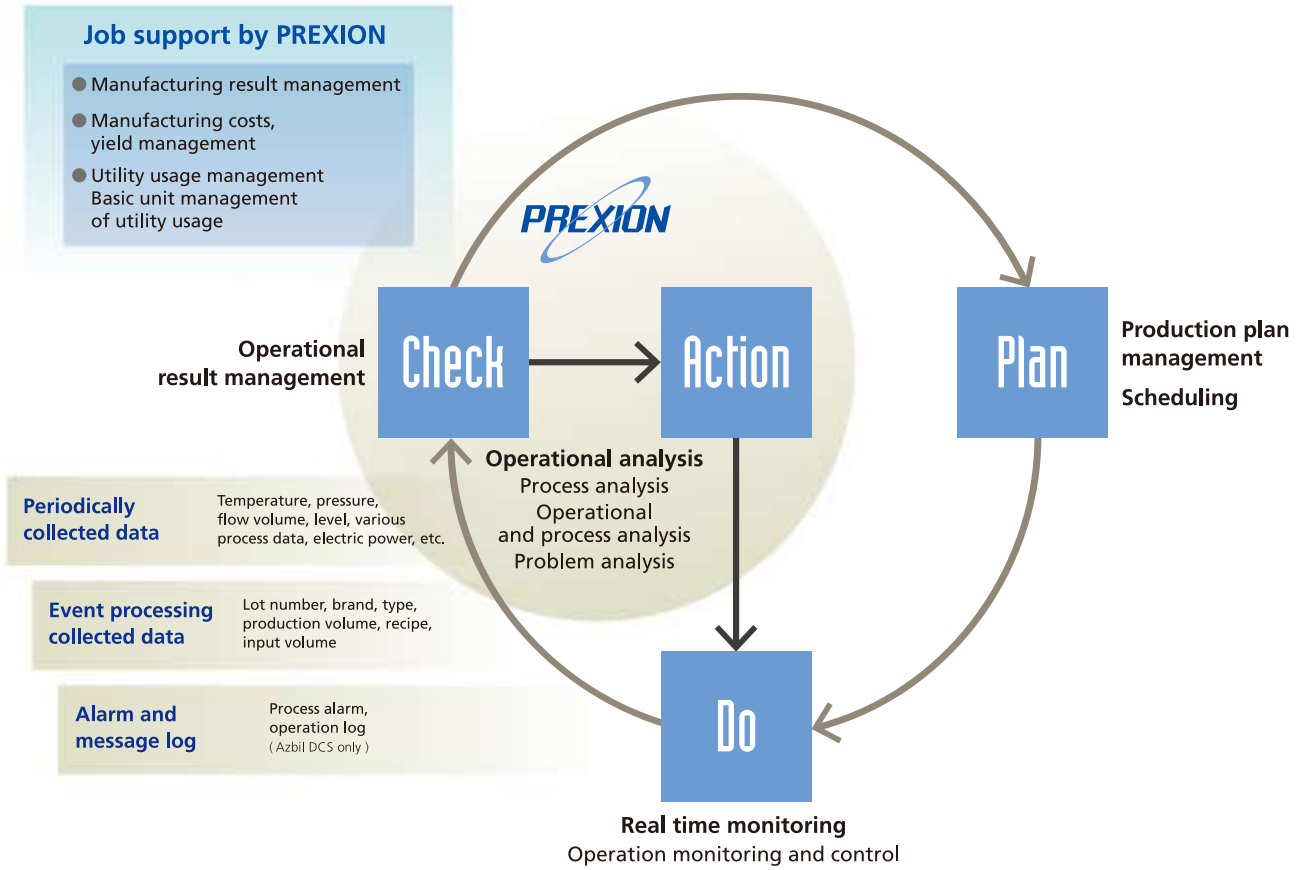- Lot results management and automatic creation of lot reports

Efficient operations
- Alarm analysis and adjustments to reduce the frequency of alarms and operator process changes

Improved safety and environment
- Problem analysis

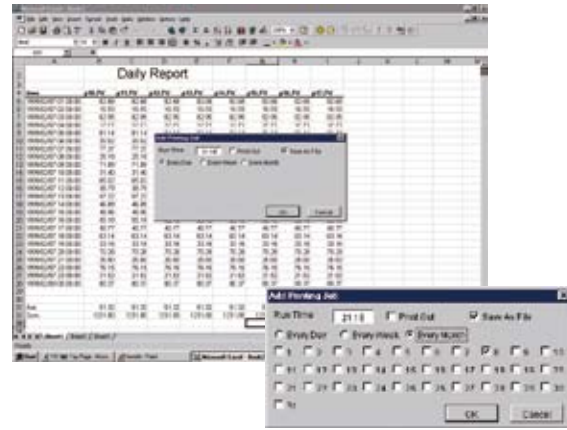# PREXION supports the "CA" of PDCA (Plan-Do-Check-Action) KAIZEN cycle.

PREXION

Operational result management

Check → **Action** → **Plan**

Production plan management

Scheduling

Operational analysis
Process analysis
Operational and process analysis
Problem analysis

Periodically collected data — Temperature, pressure, flow volume, level, various process data, electric power, etc.

Event processing collected data — Lot number, brand, type, production volume, recipe, input volume

Alarm and message log — Process alarm, operation log (Azbil DCS only)

Do

Real time monitoring
Operation monitoring and control

The manufacturing information you need, all on one page !

Lot and batch results
(next release)

Diagrams

Stock

Stock

Trends

Web-accessible information:
minor near accidents,
know-how, one-point memos, etc.

Automatic report printing

Generated ledgers are periodically sent to the printer and stored to a file at a user-specified time.

Lot results management, Lot reports

Lot results can be searched by brand, lot number, start time, end time, or any specified result. If you choose a lot from the searched lot list, the lot detail data is shown in the lot report on demand.
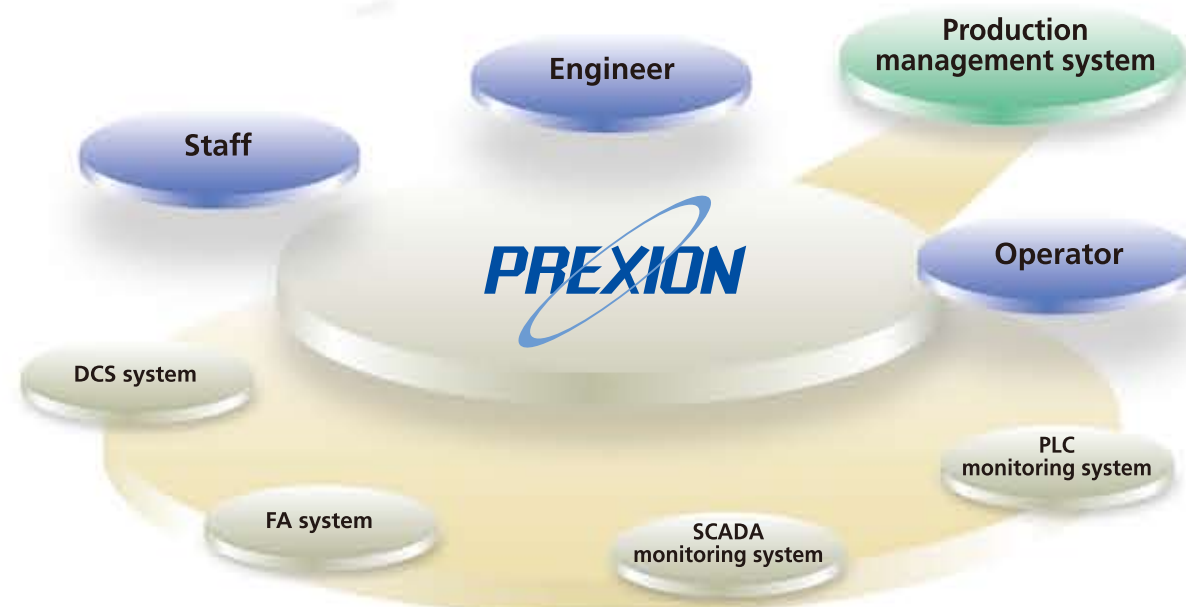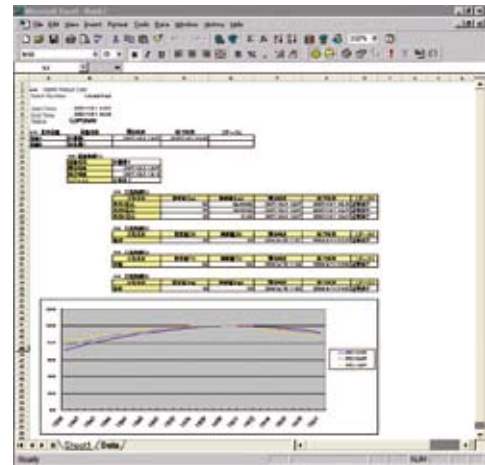

Process data collected and stored by PREXION can be easily used for a variety of jobs.

Various types of operational data can be easily examined and analyzed using the client software or spreadsheet program Excel, allowing instant feedback of the results to the site.

Engineer

Staff

Production management system

Operator

DCS system

PLC monitoring system

FA system

SCADA monitoring system

Convenient analysis tool

Display a histogram, X-Y correlation, or SPC control chart by simply selecting a tag on a graph and then dragging and dropping it onto the desired type of chart.
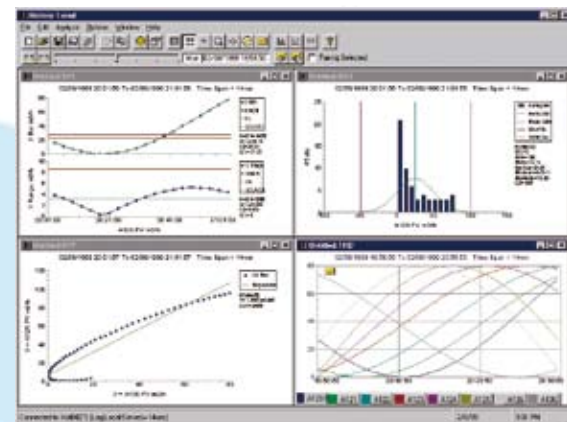
Linkage between graphs and event data

Operational data can be analyzed efficiently because trends and event data are linked.
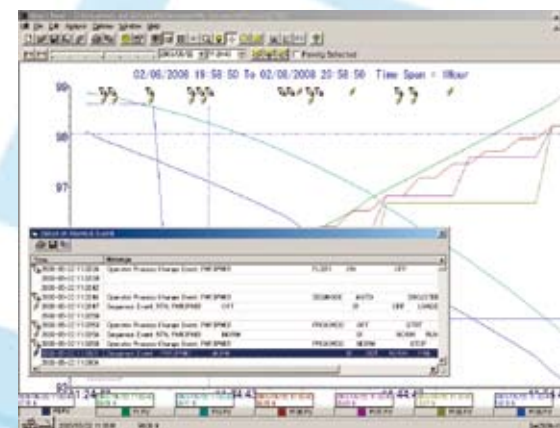
By observing trend changes, events occurring during an operation can be confirmed at a glance.

- ⚡ Process alarm
- 💻 System alarm
- 🔊 System event
- ⚠ Sequence event
- 🖐 Operator change
- CL Message
- ✴ Batch event
- User-defined event

Operator

Automated lot reports

Manufacturing results data can be automatically collected for each lot number. The operator can create any desired format for lot reports using Excel.

Automated daily operation reports are also generated according to a user-specified format (easily created in Excel).

Engineer

Problem analysis support

Graphs showing alarm events together with operator process change events can be displayed. A memo-pasting function facilitates analysis while observing trends.
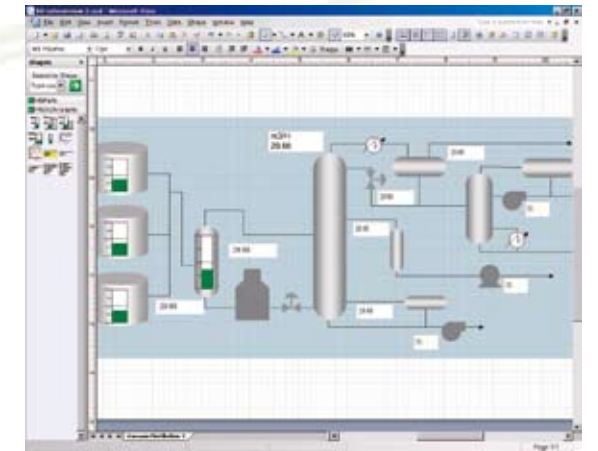
Staff

Monitoring of operational perfomence

By using the network function, needed data can be viewed on remote PCs. The operational performance can be monitored on trend or analysis screens.
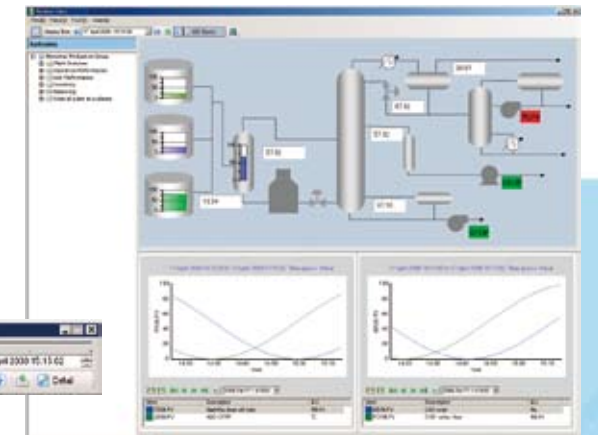
Diagrams creation by the user

Diagrams such as the one below can be created with Microsoft Office Visio without any knowledge of programming or Visual Basic.


Replay of past operations

If an operation is off-specification or if some other problem occurs, the operational status for the past several hours can be replayed (fast-forwarded) in a few minutes, for fast determination of the cause.

Past and present operational data on one screen

Easy comparison of a past optimum operation profile and the present profile on one screen.

*The present operation can be evaluated by comparing it with a past good operational status with the same tag.

Past data + Present data

Superimpose