

The image features a night-time photograph of an industrial facility, likely a refinery or chemical plant, with various towers, pipes, and storage tanks illuminated by yellow lights. A large, semi-transparent digital interface is overlaid on the scene, displaying a complex grid of data, charts, and technical diagrams. The interface includes a circular gauge on the left, a large data table in the center, and a prominent 'ASM' logo in the top right corner. The overall color palette is dominated by the blue of the digital overlay and the yellow of the industrial lights against a dark blue night sky.

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Analytical Products and Solutions

# Analyzer System Monitoring

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## Process Analyzers: Optimizing Analytical Value via Maintenance Strategy

Siemens supports your success with every analyzer and service supplied by Siemens.

Every installed base of process analyzers represents an investment to:

- Maintain Personal Protection
- Meet Regulatory Compliance
- Support Product Quality
- Improve Process Control

Every process analyzer requires maintenance. True, some technologies require less maintenance, but all analyzers, regardless of technology require monitoring to assure performance. The monitoring of the performance can be used to address maintenance and operational needs providing value to the process.

Optimizing the value of the investment can be achieved by reducing all maintenance to only that maintenance that is required. A primary goal of every Maintenance Strategy should be to deliver reliable analytical performance with a minimum of downtime. Siemens software tool, Siemens Analyzer Monitoring/Management System, provides the framework to aggregate data providing information to improve analytical reliability.

The Maintenance Strategy is typically the guide by which an ongoing review is executed for the type and quantity of maintenance required to sustain analytical reliability. The maintenance schedule, the product of a maintenance strategy, can be dynamically delivered based on the information from the Siemens Analyzer Monitoring/Management software. This ongoing and circular process can be supported thru review and evaluation of measured key performance indicators (KPI's).

## Process Analyzers: Recognizing Performance

Siemens Analyzer Monitoring/Management System is a software-based tool configured to monitor and report the

performance of all types of analytical instrumentation. This software tool provides a central monitoring system for process analyzers. The solution architecture allows for inclusion of any analyzer, any manufacturer, and any technology into its monitoring schema.

Using the data collected in the central monitoring system, KPI views and reports can highlight the performance of the process analyzer technology employed. Such views and reports include availability, reliability, validation performance, and calibration history.

Procedures, reports, electrical/communication drawings, P&ID's can be attached, and all documentation can be readily available.

The aggregation and evaluation of consecutive historical information on analyzer performance can be readily used for improving maintenance response and reducing downtime.

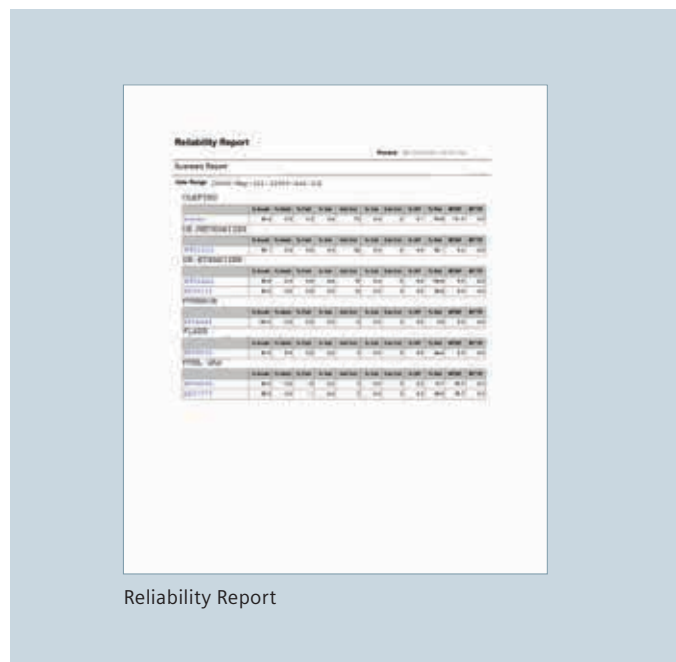
## System Architecture

Siemens software solution resides on a server connected to the plant analyzer/DCS network. Data may be securely accessed thru any machine visible to the server running an Explorer window.

Data visualization is a strong advantage Siemens Analyzer System monitoring solution. Monitoring the health of analyzers can improve continued reliability through rapid display revealing abnormal conditions.

A system "dashboard" provides an overview of the plant system with respect to process analyzers. The dashboard uses a distinctive coloring and alarming scheme to alert the user to the current condition of the analyzers. This quick overview allows efficient use of maintenance hours.

Using drill-down navigation thru a graphical interface, the user may quickly access each level of grouping or to a single analyzer for a more detailed inspection. Each overall view shows accumulative totals for alarms associated with each analyzer related to the group.



Reliability Report

## Siemens Analyzer System Monitoring is the Right choice for analyzer monitoring

### Features of the Siemens Analyzer Monitoring/Management System

- Analyzer state of operation – real-time information
- Analyzer validation/calibration monitoring and reporting
- Critical alarms are listed individually on each view
- Alarm notification – let analyzer performance communicate to you
- KPI calculations and statistics procedures – analyzer performance
- User-friendly graphics user interface for configuration and data visualization
- Based on Siemens industry hardened technology
- Maintenance logs
- Cylinder tracking – out of gas, out of certification date, etc.
- Accommodates simple and complex analyzers

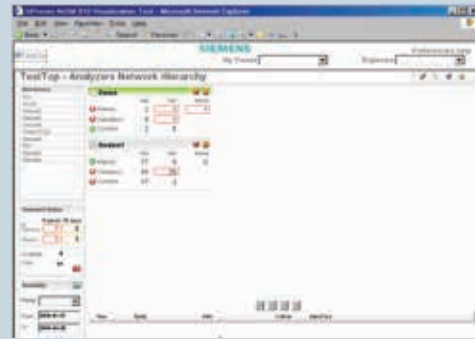
### Value of the Siemens Analyzer Monitoring/Management System

Reporting a consistent evaluation on the return of the investment in process analytics can be an elusive and subjective task. Siemens Analyzer Monitoring/Management System provides a consistent approach to the measurement of analytical performance allowing a baseline value for the process measurements to be established and tracked.

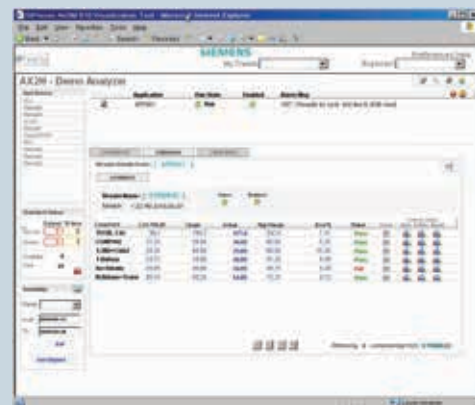
Siemens Analyzer Monitoring/Management System:

- Provides a solution for analyzer performance reporting – value returned
- Identifies the "Bad Actors" – where to improve/reduce
- Will Improve maintenance practices – consistent procedures
- Will Increase confidence in the analyzer program – operations value chain
  - Maintenance Mechanic - Improved response, reduced call outs
  - Supervisor/Engineer - Time Management
  - Management - Reporting availability and KPI performance
- Operations – Improved Confidence in performance of existing investment

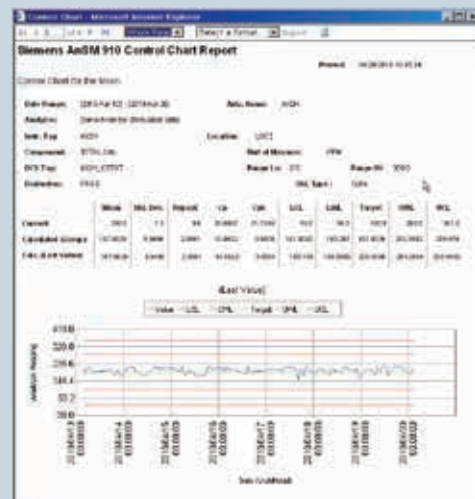
Siemens Analyzer Monitoring/Management System provides a basis for establishing the value of the analyzer investment. KPI reporting performance sets an expectation of continued performance. The distribution of the analytical performance information provides a support basis for new investments using data based on managed experience.



Overview



Analyzer



Control Chart Report

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