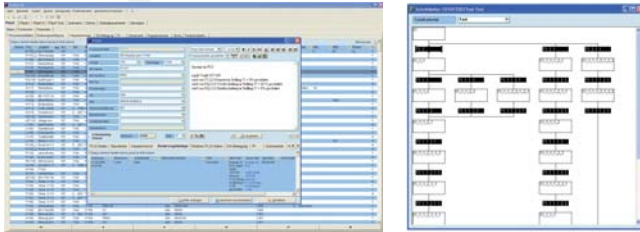


PLSDOC® RE: Plant documentation and maintenance system for industrial plants

PLSDOC® RE offers an integrated solution for the creation of circuit documentation for industrial plants:



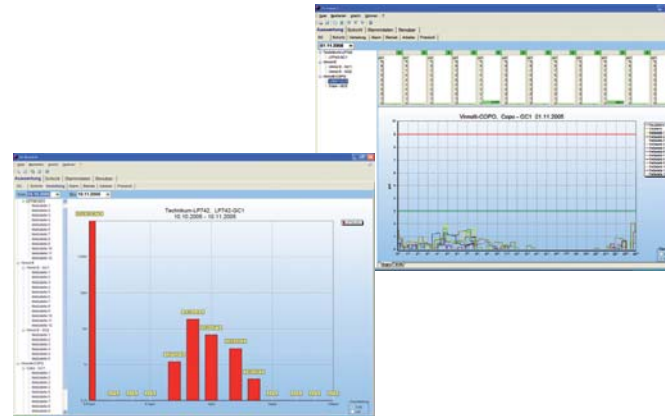
- ▶ Requirement specification function: collection of process instructions, function descriptions and step chains
- ▶ Projecting basis for software realization
- ▶ Generation of a plant operator manual in HTML format (limit value lists, step chain overview)
- ▶ Integration of requirement specifications into operating systems and control systems
- ▶ Availability of FAT / start-up procedure / loopcheck reports
- ▶ Administration and online-update of PI-data
- ▶ Online-update of circuit data from the process control system (e.g. PCS7, Teleperm M, Delta V)
- ▶ Quantity structure for project calculation
- ▶ Import and export of data to/from external systems
- ▶ Available as Siemens PCS7 add-on

Advantages

- ▶ Central data management (requirement spec, limit values, plant documentation)
- ▶ Standardized circuit description sheets
- ▶ No multiple rework of documentation necessary

IAMS: Permanent surveillance of ambient air, recording of applied loads, alerting

IAMS is a centralized system to permanently monitor and analyse ambient air regarding multiple hazardous substances with possibilities to evaluate the applied load per employee or per shift.



- ▶ Monitoring and documentation of a large variety of GC-devices
- ▶ Employee-based record showing the applied load
- ▶ Alert per employee when exceeding allowed limit values
- ▶ Comfortable grouping and sorting functions for message data
- ▶ Proof of shift mean value compliance

Through daily, monthly and annually generated reports the applied loads and other relevant data are documented fast and clearly.



Software Products

OSMAR modules:

- ▶ Electronic shift book
- ▶ Alert Management
- ▶ Long term process value archiving

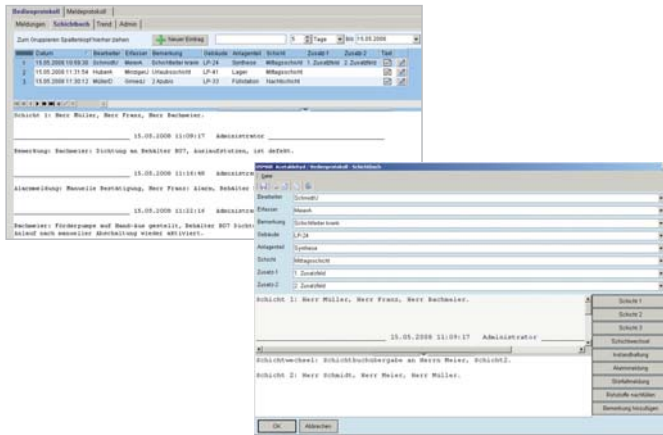
PLSDOC® RE: Plant documentation

IAMS: Permanent surveillance of ambient air

OSMAR: Electronic shift book, shift handover book, recording of malfunctions, stand-by operations

In the shift book the events occurred during shifts are recorded and documented.

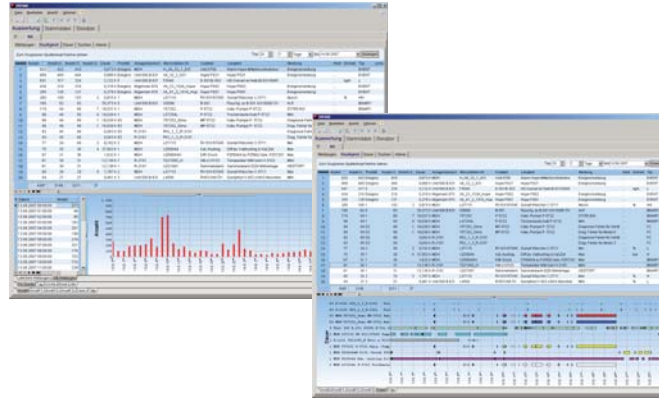
In the table view user-defined basic data like date, editor, building, plant, current shift or person in charge is shown and ready for evaluation.



- ▶ Coupled with the OSMAR archive system: shift book entries can be made directly from the message list
- ▶ Retroactive changes are documented transparently
- ▶ User-defined text modules facilitate the input of recurring records
- ▶ Central documentation and extra proof for events happened in the plant area
- ▶ Recording of stand-by operations, malfunctions and many more

OSMAR: Alert Management and long term archiving for process control systems

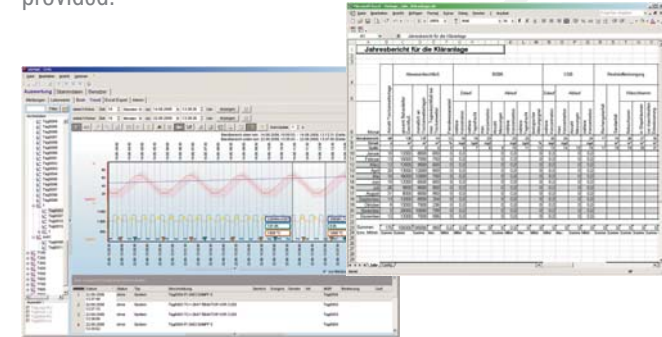
The OSMAR system serves as a long term archive for PCS messages, batch reports and operator interventions.



- ▶ Archiving of any type of process control systems, e.g. PCS7, Teleperm M, Freelance 2000, Foxboro I/A-Series, ABB Symphony, Delta V
- ▶ Message analysis, error tracking, basis for plant optimization
- ▶ Comfortable grouping and sorting functions for indicating message data
- ▶ Comprehensive message analysis functions: frequency evaluation, duration, etc.
- ▶ Report archiving for each batch
- ▶ Successfully in operation for many years at customers comprising approx. 270 servers and approx. 60 different message reports
- ▶ Increase in plant security (shorter reaction times, less alerts)
- ▶ Detection of training potential of plant operators (analysis of plant operation mode)

OSMAR Historian: Module for long term process value archiving

Central archiving of actual process values of arbitrary process control systems. A large amount of analysis functions is provided.



- ▶ Curve display connected with corresponding PCS messages
- ▶ Accentuation of limit value violations by placing marks directly in the curve
- ▶ Batch-oriented display and analysis of curves
- ▶ User-specific storage of sets of curves
- ▶ Two abscissae for timeframe comparison
- ▶ Analysis tools: zoom, cursor, area band tape measure
- ▶ Logarithmic representation of the ordinate with variable selection of the logarithm base
- ▶ Propagation of malfunction messages via e-mail/SMS
- ▶ Recording of manually generated laboratory analysis values
- ▶ Envelope curve display for large time ranges
- ▶ Mathematical evaluation of process values using calculation tags
- ▶ Transfer of actual process value data to MS Excel® submittals