

Plant Historian LAB

Laboratory data acquisition

LIMS: Laboratory information management system



Plant Historian LAB – laboratory data acquisition – is a system for laboratory data acquisition and analysis. Plant Historian LAB is designed to acquire actual value and provide informative trend and variance diagrams in a central, corporate-wide system. Furthermore, violations of threshold values can be identified and reported immediately. Users of Plant Historian benefit mainly from the real-time data acquisition as well as from short response times in case of threshold value violations.

Plant Historian LAB offers flexible and intuitive analysis tools. A large number of visualization options provides a customizable data analysis. Individual trend graphs and analysis parameters support the implementation of a continuous analysis and improvement process.

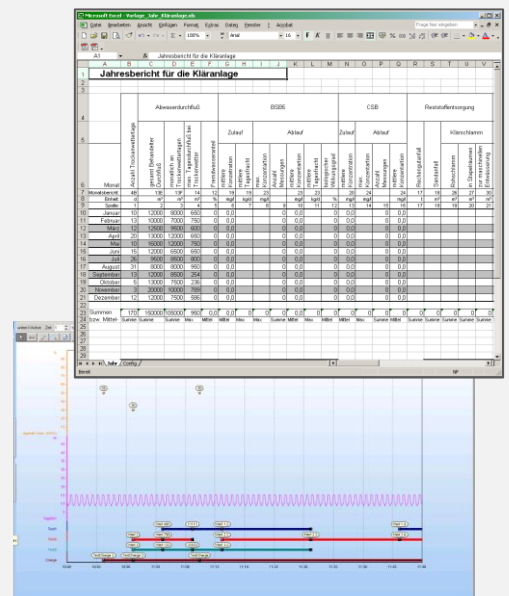
Plant Historian LAB provides relevant information in standard documents, e.g.:

- ▶ Identification of process failures and error sources
- ▶ Customizable analysis options
- ▶ Reports in standard PDF or Excel documents
- ▶ Connection of laboratory, event and trend information

Analytische Daten Hostapur SAS 60	
Probenahme aus Tank-Nr.: _____	
Herstellung: vom bis _____	
Vorprüfung	
PrüfMethNr	Datum der Probenahme: _____
1. PF010000	Alkansulfonatgehalt (WAS): _____ %
2. -	Wasserzugabe: Zugabe dünner Seife: WAS _____ % _____
Prüfung Freigabe	
Datum der Probenahme: _____	
1. PF010000	Alkansulfonatgehalt (WAS): _____ %
2. PF015000	Natriumsulfatgehalt (Na ₂ SO ₄): _____ %
3. PF020000	Paraffingehalt (KW): _____ %
4. PF065500	Wassergehalt (H ₂ O): _____ %
Summe: _____ % 0,00 %	
5. PF035000	pH-Wert einer 5 % igen Lösung: _____
6. PF030000	Optische Durchlässigkeit einer 30 %igen Lösung bei 405 nm und 1 cm Schichtdicke: _____
7. PF025000	Viskosität einer 30 %ige Lösung bei 30 °C: _____ mPas
8. PF095000	30 %ige Lösung: klar = [1], schwach trüb = [2] oder stark trüb = [3] bei Raumtemperatur: _____
9. PF080000	Sind in einer 30 %igen Lösung keine = [1], wenige (max.10) = [2] oder viele (>10) = [3] schwarz/braune Stippen enthalten: _____
10. PF075000	Wasserstoffperoxidgehalt: _____ %
11. -	Zusatz an Acticide: _____ %
Ausführender _____ Kennzinsnahme Betriebsleiter _____	

Functions:

- ▶ Manual or automatic laboratory data acquisition
- ▶ Trend analysis with visualization of related PCS events
- ▶ Real-time notifications of threshold value violations
- ▶ Possibility to compare measurement results
- ▶ Manual or automatic PDF or Excel reports
- ▶ Calculation tags: connect tags via mathematical operators and functions
- ▶ Customizable analysis functions: create and save layouts and trend groups
- ▶ Several analysis and visualization tools, e. g.:
 - ▶ Real-time visualization
 - ▶ Measuring tape function
 - ▶ Customizable coordinate system
- ▶ Data output in Excel or PDF documents
- ▶ Filling of existing Excel templates with actual value data
- ▶ Batch-based analysis and trend visualization



PCS-independent - scalable - intuitive



Benefits:

- ▶ Identifies process failures and error causes
- ▶ Ensures data acquisition, data archiving and fast response times
- ▶ Document and backtrack measurement entries
- ▶ Notifies supervisors in case of incorrect measurement entries
- ▶ Triggers escalation process in case of threshold value violation and provides employees with procedural instructions
- ▶ Connects laboratory, event and trend information in one system
- ▶ Generates production relevant documents automatically
 - ▶ e. g. KPIs reports, shift reports, authority logs
- ▶ Visualizes the production status
- ▶ Intuitive analysis tool: easy, clear, customizable
- ▶ Batch-based analysis

Plant Historian LAB provides a **gapless acquisition** of laboratory data, **fast reaction times** in case of escalation as well as **intuitive analysis tools**.

Technologies:

- ▶ Standardized interfaces to your PCS/PLC environment
- ▶ Siemens-approved OPC gateway
- ▶ OPC printer interface for any kind of control system
- ▶ Central SQL database and application server
- ▶ High availability due to buffering structures and redundancies
- ▶ Scalable system: add new PCS/PLC connections any time
- ▶ Menu-based installation

