Laboratory data and quality management

pdv
software
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Optimize production and contract laboratories

pdv-lims3 is a laboratory information management system with a special focus on the presentation of quality data incl. limiting values, for example for real-time monitoring of production or for observing trends. pdv-lims3 is designed to be non-sector-specific and therefore is used in many fields.

Features

- *Separate user interface for daily lab work or management tasks*
- *Support for multiple determinations including statistics*
- *Calculated results using self-defined formulas*
- *Repeated measurements with different scope of analysis*
- *Storing analyses and test specifications for mapping the laboratory environment*
- *Multi-level limit monitoring (warning, intervention and specification limits)*
- *Attaching documents*
- *Creation of labels, routing slips, internal evaluations and test reports/certificates*
- *Documentation of tests and release of results („four-eyes principle")*
- *Support for sample shipment and disposal*
- *Search through samples, tasks and results*
- *Sample history (audit trail, changelog)*
- *Mobile data logging using a smartphone or tablet*
- *Interfaces to ERP systems (including SAP QM) and laboratory automation systems (including polab®)*
- *User interface in German, English and Russian (other languages on enquiry); data contents can also be stored multilingually (e.g. for test reports)*
- *easy, comfortable operation (user experience)*

Tasks, samples, measurements and analyses are the base of lab work with the laboratory information management system pdv-lims3. Analyses depict the laboratory portfolio with individual requirements (e.g. multiple determination, appointed time for performing, etc.). A task defines the test plan and if necessary the limit values to be monitored. In production laboratories that's the way consistent processes are defined; in contract laboratories this element represents the customers' orders. In addition to the specified sample data, user-defined information can be stored.

The (measurement) results are entered manually or taken automatically from interfaces (analyzers, external laboratories, etc.). Results can be calculated using self-defined formulas. If necessary, repeated measurements can be created.

Task-related documents can either be linked as a reference or saved directly to the database. The reporting system creates individual labels, routing slips, internal evaluations including statistics and certificates.

Thanks to the use of Microsoft Office for report generation, a comprehensive interface library for the connection of numerous analyzers and export options to merchandise management systems such as SAP, pdv-lims3 integrates perfectly into your existing IT landscape.

Key features for everyday lab work

Easy sample entry

A wizard guides you comfortably through the necessary steps. Samples can be created either manually or taken over from superordinate systems (such as SAP). Each new sample gets assigned a unique number automatically; additional sample data (origin, material, priority, etc.) can be added. Laboratory labels with barcodes or routing slips are printed directly from the wizard.

Supporting workflows

To-do lists provide an overview of all open activities including priorities. Results are entered quickly and easily in table form. Limit values are monitored in real time and possible limit violations are visualized immediately. You can:

- Enter results analysis and sample related,
- Expand or reduce the scope of analysis,
- Add repeated measurements with different scopes of analysis,
- Assign and view status of tasks, samples and analyses,
- Add and view documents e.g. to tasks, samples and test specifications,
- Ship or dispose samples.

reports, documents (Excel, PDF)

entry of tasks and samples

to-do lists, routing slips, labels

measured values (entry, import, calculation)

storage, shipping, disposal

live/online monitoring (control charts)

limit value checking (specification)

Review and release of results

You can check results, save comments and create the desired test reports/certificates in the sample's annotation. The system supports the four-eyes principle by logging the appropriate steps. Authorized users can approve samples. Results may be passed on to external/superordinate systems (e.g. SAP).

### Analytical limit values and specifications

Detection limits, determination limits and plausibilities are stored centrally in the master data. Specifications (warning, intervention and specification limits) based on standards, customer specifications, materials or test equipment monitoring, etc. can be stored individually. The limit values can be displayed in quality control charts (optional).

Reliable logging

The changelog records all changes to the samples, tasks or measurements. This makes it possible to trace back which record was changed at what time (audit trail).

Simple search

To find samples, you can narrow the search to certain meta information (sample origin, period of time, materials, etc.) and test results. You can change over directly from the search results to editing the selected sample or create evaluations.
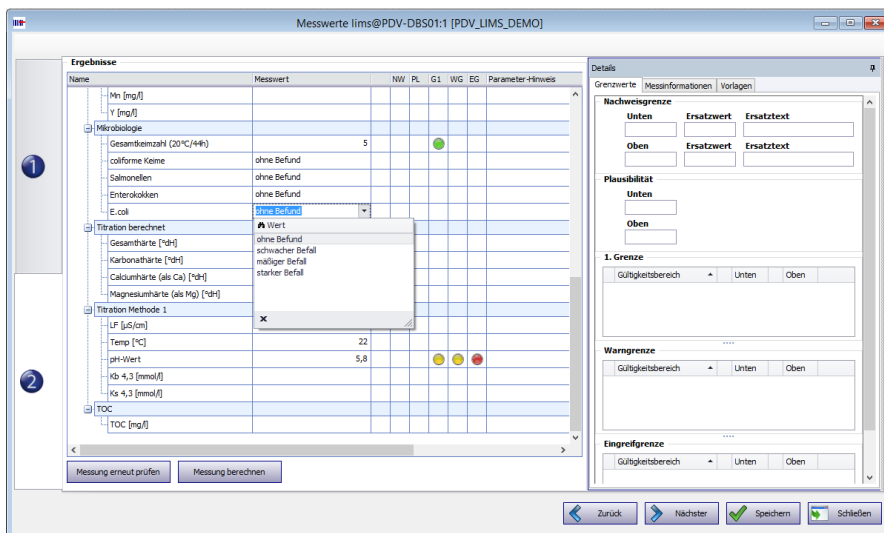
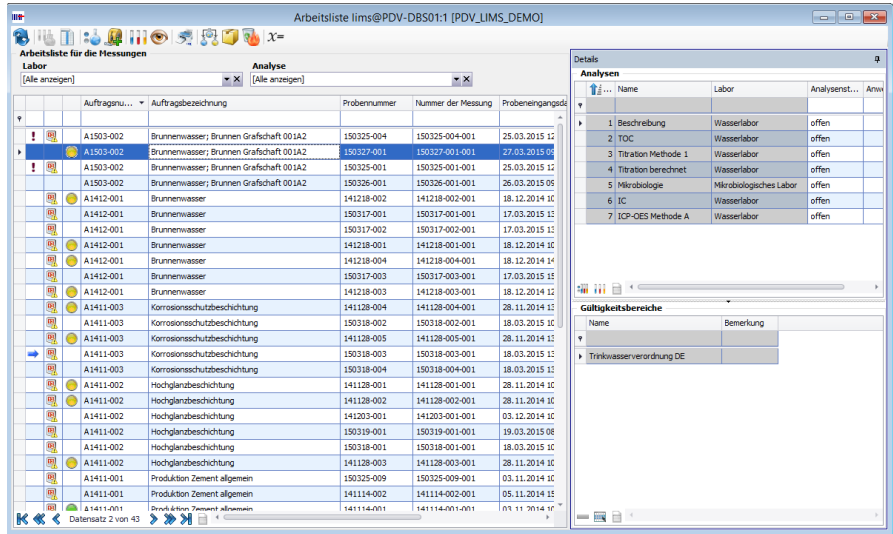*Easy entry of sample results using a step-by-step wizard*

Central master data

Centrally maintained master data - such as measuring units, storage structure, materials, analyses, test specifications, instructions, sample attributes, sample locations or parameters intended for analysis - are available within pdv-lims3 corporation-wide. This individual configuration allows optimal adaptation to your lab environment and operation. This is how a standard software becomes your very own LIMS.

To-do list: overview of all open lab activities

You can also record measured values „on the move" at remote locations or measuring stations using the smartphone/tablet app **pdv-lims3 mobile** and transmit them directly to pdv-lims3. pdv-lims3 mobile replaces the manual collection of data in value lists and thus contributes to the resource-saving paperless laboratory.
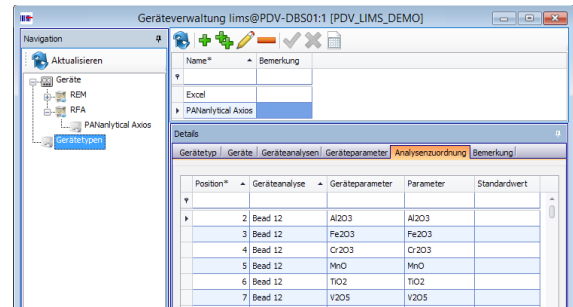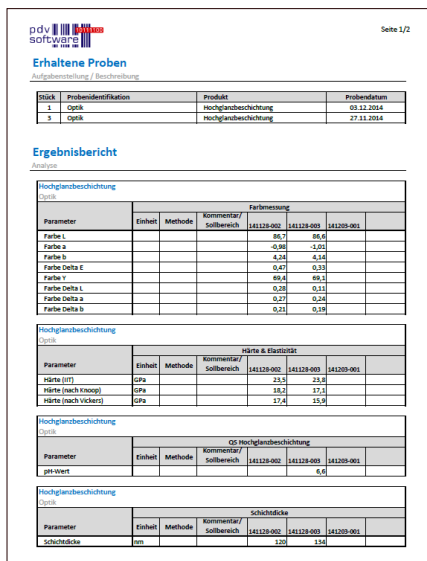
Integrated device management with assignment of the values to be transferred

Comprehensive reporting

You can create multilingual test reports, certificates, routing slips and labels with barcodes etc. in PDF or Excel format. An optional reporting system supports functions for grouping, aggregation and statistical evaluation of the collected data.

Examples: task report (left) and measurement result report (right)
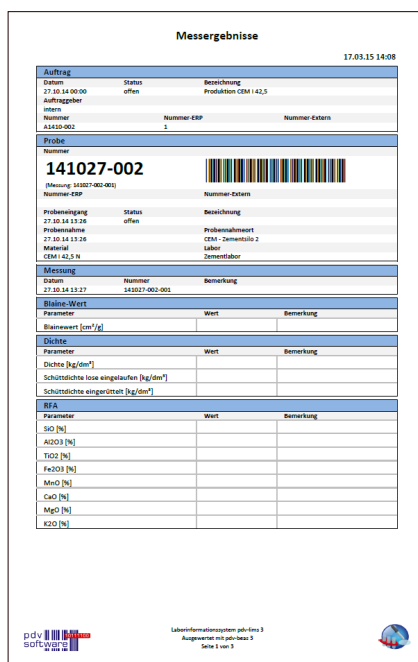
Individual interfaces and lab equipment couplings

Data exchange with analytics takes place via

- configurable universal interface formats,
- couplings that are optimally adapted to the existing analysis methods and lab equipment,
- the integration of fully automated laboratory automation systems (including polab®).

Nevertheless, the variety of device interfaces is unmanageable; the exchange with SAP & Co. is complex even via established formats. The perfect integration into your laboratory environment is ensured by the know-how of our experts, who have been at home in various industries for more than 25 years.