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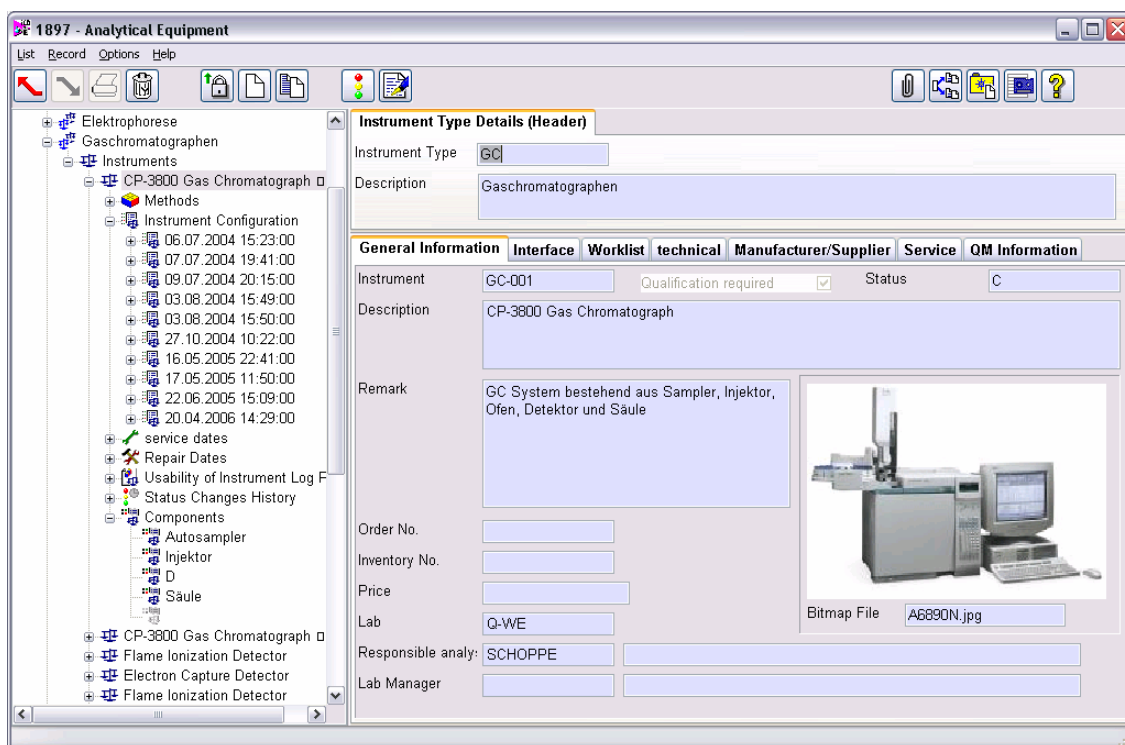


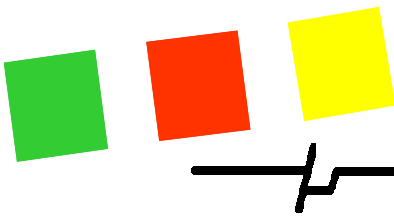
What options are offered by instrument management in LABS/Q®?

Documentation of your control types

In LABS/Q® a complete documentation of all control types (including single devices like a balance or complete HPLC systems) is carried out including all information concerning configuration history, operations of control types, maintenance information as well as all repairs.

Thus a central management of all control type relevant information is established. Written apparat log-book entries are replaced by concise database entries. You will gain a survey of service dates of control types. You can prepare for these occasions by providing replacement devices or by appropriate control of chemical analysis.

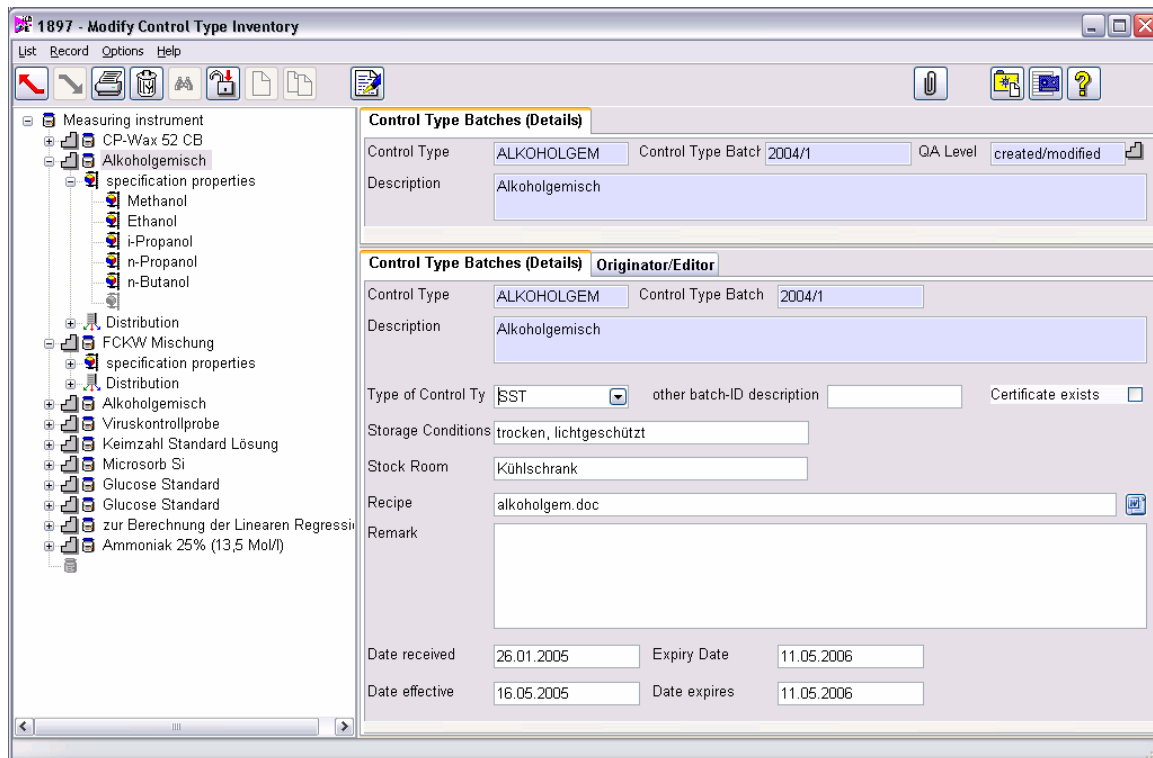




Control types and their batches

LABS/Q[®] offers you the control types, standard units, control and blank samples necessary for method check-out as well as instrument management. These can be managed in **LABS/Q**[®] together with their characteristics as well as their service life data.

You will receive information concerning characteristics, batch and service life of the control type. You will have extra security about control type usability because the system checks the lodged service life of the batch.



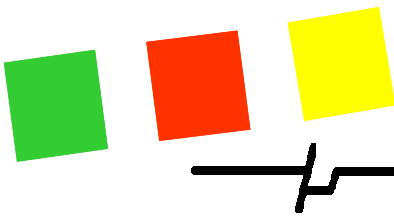
Event, deadline and user dependent monitoring

For the instruments log plans are lodged in the system. These log plans describe the extend of analysis as well as the tolerances to be kept against control type batches.

It is determined in the instrument in which form (e.g. qualification, calibration, approval) as well as to which extend (e.g. in case of configuration change, deadline dependent, user dependent) a monitoring should be executed. Combined with this the control type status is determined. At the end of monitoring a usage decision is generated together with the next check.

Approval can be carried out anticipatory and automatically by the system. You cannot forget any controls because the system generates and plans necessary submissions for the instrument in the background. You will gain a high level of security in adherence to regular monitoring of your control types.

You can reduce the effort to classify and monitor your control types by discriminating between qualification, calibration and control. Status change history offers you the means to understand when the control type was qualified, calibrated or controlled.



Example: Log plan determination

The screenshot shows the '1897 - Analytical Equipment' window. The left sidebar displays a tree view of equipment including 'Elektrophorese', 'Gaschromatograph', and 'CP-3800 Gas Chromatograph'. The main area is titled 'Instrument Details' and 'Instrument Type Details (Header)'. It shows the instrument ID 'GC-001', status 'C', description 'CP-3800 Gas Chromatograph', and lab 'Q-WE'. Below this, there are tabs for 'Instrument log plan', 'Calibration', 'Test of System Usability', and 'current state'. The 'Calibration' tab is active, showing 'Configuration for Calibration' with sections for 'Months' (checkboxes for all months), 'Weeks' (checkboxes for 1st to 6th week), 'Days' (checkboxes for all days), and 'Hours' (checkboxes for 00:00 to 23:00). An 'Interval settings' section includes 'Maximum of Number of Operations between two Calibration' (set to 10), 'Maximum of Time between two Operations' (set to 'YYMMWWDDHHMM'), and 'Time of Take-off for Calibration For Interval' (set to '16.05.2005 11:00').

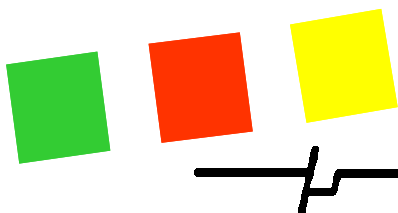
Example: Usage decision for control type

The screenshot shows the '1897 - Submissions (module spanning)' dialog box. The title bar says 'Instrument released'. The main area is titled 'Usage Decision (Release)'. It contains several fields: 'Usability' (dropdown menu with 'C' selected), 'Reason' (text field), 'Remark' (text field), 'next calibration' (date and time dropdown set to '23.11.2006 11:00'), 'Number of Operation' (text field with '10'), 'next control' (date and time dropdown set to '23.11.2006 08:00'), and 'Number of Operation' (text field). At the bottom, there are four buttons: 'Cancel', 'Finish/Commit', 'Cancel/Delete', and 'Help'.

Evaluation for instrument and control type management

In LABS/Q® various modules allow you to access ad hoc all data for evaluation. Samples calibrated under a specific device configuration and their results can be displayed.

Quick data evaluation encourages laboratory employees to notice if and to what extent results are correct or whether a new analysis is necessary. At the same time employees are shown whether the control types used need inspection.



Example: Operation list of a specific device configuration

Instrument Details | Instrument Type Details (Header)

Instrument: GC-001 Lab: Q-WE
 Description: CP-3800 Gas Chromatograph
 Configuration date: 20.04.2006 14:29

Operations

W	S	M	Submission numrt	Sample number	Method	Accomplishm	Operation	Operationtime
			000000712	001	XOH	1	1	25.04.2006 15:55
			000000735	001	XOH	1	1	26.04.2006 12:07
			000000736	001	XOH	1	1	26.04.2006 13:14
			000000738	001	XOH	1	1	26.04.2006 13:16
			000000738	001	XOH	1	2	26.04.2006 13:21
			000000738	003	XOH	1	1	26.04.2006 13:21
			000000738	003	XOH	1	2	26.04.2006 13:22
			000000744	001	XOH	1	1	28.04.2006 12:04
			000000755	001	XOH	1	1	18.05.2006 11:33
			000000789	001	XOH	1	1	18.07.2006 14:09
			000000812	001	XOH	1	1	11.09.2006 17:25

Example: Graphic evaluation with trend rules

LABSGraphic - Graphical evaluation of results

File Edit View Settings Evaluations Window Help

ALKOHOLGEM: C2H5OH (XOH)
 Frequency distribution Methanol (Bestimmung von Alkoholen mit der GC)
 (Result.Count) vs (% (m/m))

ALKOHOLGEM: C4H9OH (XOH)
 Control chart n-Butanol (Bestimmung von Alkoholen mit der GC)
 (% (m/m)) vs Sample time

ALKOHOLGEM: C3H7OH (XOH)
 Control chart i-Propanol (Bestimmung von Alkoholen mit der GC)
 (% (m/m)) vs Sample time

ALKOHOLGEM: C2H5OH (XOH)
 Control chart Ethanol (Bestimmung von Alkoholen mit der GC)
 (% (m/m)) vs Sample time

No.	Sample time	Submission	Lot	Result	Test value	Dimension	State	Lower Warning Limits	U
1	06.07.2004 15:23	000000025-001	2004/1	5,04	5,04	% (m/m)	0		
2	06.07.2004 15:27	000000026-001	2004/1	5,01	5,01	% (m/m)	0		
3	06.07.2004 15:29	000000027-001	2004/1	5,05	5,05	% (m/m)	0		
4	07.07.2004 19:19	000000028-001	2004/1	5,03	5,03	% (m/m)	0		
5	07.07.2004 20:16	000000029-001	2004/1	4,99	4,99	% (m/m)	0		
6	08.07.2004 11:50	000000033-001	2004/1	4,97	4,97	% (m/m)	0		
7	09.07.2004 20:15	000000042-001	2004/1	5	5,00	% (m/m)	0		
8	09.07.2004 20:18	000000043-001	2004/1	5	5,00	% (m/m)	0		
9	23.07.2004 14:52	000000044-001	2004/1	5	5,00	% (m/m)	0		
10	03.08.2004 15:41	000000053-001	2004/1	5	5,00	% (m/m)	0		
11	10.08.2004 14:25	000000055-001	2004/1	5	5,00	% (m/m)	0		
12	17.10.2004 16:03	000000063-001	2004/1	5,02	5,02	% (m/m)	0		
13	27.10.2004 10:22	000000176-001	2004/1	5,03	5,03	% (m/m)	0		
14	15.11.2004 13:18	000000184-001	2004/1	5	5,00	% (m/m)	0		
15	31.03.2005 14:45	000000294-001	2004/1	5	5,00	% (m/m)	0		
16	11.04.2005 00:49	000000305-001	2004/1	5	5,00	% (m/m)	0		
17	11.05.2005 09:50	000000310-001	2004/1	4,81	4,81	% (m/m)	2		