

1 Purpose

This document describes the fixed bugs and problems as well as improvements in the following new firmware versions:

- 5.900.0020
- 5.915.0020
- 5.916.0020

in comparison with the firmware versions:

- 5.900.0011
- 5.915.0010
- 5.916.0010

2 Improvements

Topic	Description
PC/LIMS report	A new feature is that languages that require Unicode characters (e.g. Russian, Chinese, Korean) are now supported. The prerequisite for this is tiBase 1.1.
Calibration	The serial number of the sensor is listed on the result report.
E-mail address	50 characters are available in the device manager for E-mail addresses.


3 Fixed bugs and problems

Topic	Description
General	The Touch Screen could freeze or crash (error message "Application error J9W.exe").
Custom result templates	Calculation formulas entered that required more than one line were not broken up into several lines in the report. Calculation formulas with more than 60 characters could not be entered. An error message was displayed.
Report Sample rack list	The report printout did not function.

Topic	Description
Standard addition	The list items with the increments in the Standard addition / Addition increments dialog window were not numbered correctly. The output of the results was incomplete in the report.
Report header	User logos that exceeded a certain size could not be read in correctly. User logos can now be a maximum of 64 KB in size.
Routine dialog	Certain settings in the Routine dialog were not adopted in the 915 and 916 instruments.
Fixed key ?	The touch screen could freeze in certain dialogs when the Help key was tapped.
Manual control	An incorrect parameter designation for the temperature display was displayed in the Measure / Info sensor dialog.
Dialog Messages / Details	Messages were not broken up into several lines.
Mathematical function TST(,) – Set replacement value	Did not function under certain conditions.
Sample size limits	The sample size limits were not checked correctly if the sample assignment table was used and if at the same time the Request assignment identification parameter was activated.
MAT (Manual titration)	Dosing could not be carried out in the live dialog from the main dialog because the Dose button was not available.
ELT (Electrode test)	Incorrect measured data could result if the buffer measurement was canceled prematurely.
KFC (Karl Fischer coulometry) BRC (Bromine index determination)	An incorrect unit was displayed in the More determination data / View data dialog for the Drift (Drift correction) parameter.
Balance	If a balance (via USB-RS-232 adapter) and a USB flash drive were both connected to a USB hub at the same time, the connection between the balance and the instrument could become lost the instant the USB flash drive was removed. The adoption of the sample size did not function if the rest of the data traffic via USB was very large at the same time.
Extraction time	If the extraction time was adjusted to a duration that was less than the extraction time that had already elapsed, then it could happen that the display of the extraction time in the live dialog would freeze with a negative value. The titration would, however, continue to run.
Common variable	If a valid value was assigned to an invalid Common Variable (CV) in the CALC command during the method run, then a false error message would be displayed.
Command MEAS Measure	If more than one command was contained in a method, then the measurement results would be included several times on the result report.

Topic	Description
IP address	The assignment of a fixed IP address did not function.
Languages with Unicode character set	Were not output correctly in the PDF reports.
Command CAL pH	A measuring temperature could not be transferred to this command as an R variable.
Report Statistics overview	Generated a superfluous, empty report page.
User administration	The status of a user could not be changed from inactive to active if there was only one administrator.
Command Dosing (monitored)	The insertion of the command caused the instrument to crash.

4 Known errors

Topic	Description
Fixed key 	Screenshots can only be printed out on the connected printer. The PDF file is generated, but without any content.

5 Compliance

The current firmware version 5.900.0020 does not contain any modifications that affect the conformity of the 900 Touch Control regarding 21 CFR Part 11 and GAMP.

Herisau, February 19, 2013



P. Hunziker
Vice President,
Head of Development



U. Kürsteiner
Head of Quality Management