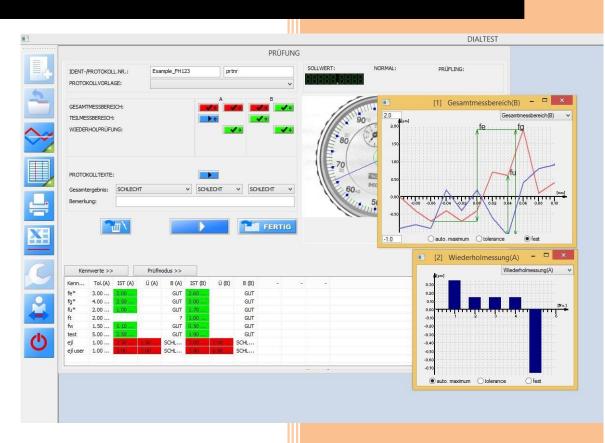
DIALTEST

SELF ASSESSMENT



MESSTECHNIK KLÜGER
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Application range of software

DIALTEST software allows the control of length measuring devices which are used for the calibration of measuring tools. Depending on the measuring device, it is possible to move manually to semi- or fully-automated predefined setpoints and then analyse the effective actual values.

The software has a mostly free configuration for the test sequences and desired analysis calculations. All databases and interfaces are disclosed so that the user can process and document the test results individually.

Scope

Software DIALTEST 7 (all revisions) Software DIALTEST 8 (all revisions) Software DT Kali 7 (all revisions)

Test planning

The software allows the testing of measuring tools (TARGET-ACTUAL comparison) as per in-house and international standards and norms. Since this is a "configurable product" (classification as per GAMP 5), the user - or a company commissioned by the user - can decide the test plans and analysis calculations used to meet the valid requirements.

The software does not check the correctness of the specifications. A warning message will be issued at some points if there are clear contradictions. Each test plan is saved in a file. In parallel, the program manages a database, which provides essential features for administrative purposes.

The software can mostly prevent unauthorised access to created test plans using limited user rights and password queries. Subsequent manipulation of test plans can, however, not be excluded due to the free access to the test plans with other software tools.

Test sequence and calculations

The software sends the coordinates for the desired setpoint positions to the measuring device. The accuracy with which these are actually achieved depends on the test equipment (or manual devices used by the user). The software calculates the error at this point by analysing the actual measuring position and the actual display at the test piece. All actual values are saved and documented in the software. For certain settings, the deviation is rounded to the graduation precision of the test equipment or even a "linearity correction".

Implemented algorithms allow fully-automated testing of measuring tools. The accuracy depends on the hardware used as well as on the ambient conditions and has to be defined by comparison calibrations or test series.

For automatic tests, the user can select between highest possible accuracy and minimal test time. In general, the software has been programmed in such a way that measuring values which are not clearly detected lead to an interruption of the automatic sequence.

The software cannot evaluate the correctness (validation) of a value read by the test instrument or entered by the user. The values are calculated with the greatest possible resolution. The measuring values are at no point manipulated internally or modified by the software.

Analysis calculations are implemented based on known norms and described in the handbook. Each calculation has been implemented to the best of one's knowledge and been tested with example measuring values. The results are protected against manipulation within the program.

Documentation and data security

The documentation of the test data (test log) is done by exporting the measuring and characteristic values to a log editor (e.g. Excel) or even to an external management program.

All relevant measuring data from a test are saved into a data file each. It is the duty of the user to backup these files regularly in order to prevent data loss caused by defect computer technology or computer viruses. The disclosed structure of test plans and test data require external measures to prevent unauthorised access.

The software does not have any hidden functions to capture user data or user behaviour. No data is sent to or received from external organisations or persons via a network or the internet. Prior to each delivery, the data carriers undergo an extensive virus check.

A revision list verifies the removal of important program faults and program improvements. Simple program faults only limit the functionality of the software and are, if possible, removed with the next release.

If a program fault has been detected which leads to a significant increase of measuring uncertainty, then registered clients or resellers are immediately warned (even before removal of the fault).

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