

TramQA

TRAM-QA is a versatile testing package, especially designed for the TRAM Testers equipment. Running on the MS-Windows platform TRAM-QA is extremely easy to use. TRAMQA gives:

- automatic storing of data and direct overview of the archive in a calendar
- automatic calculation of key-figures (makes it easy to control when outside tolerance)
- easy to handle many types of tests and products.

The screens viewed by the ordinary user are kept to a minimum of 3 screens resulting in a quick learning process. The screens depicted here below comprise a calendar, a spreadsheet and a curve.

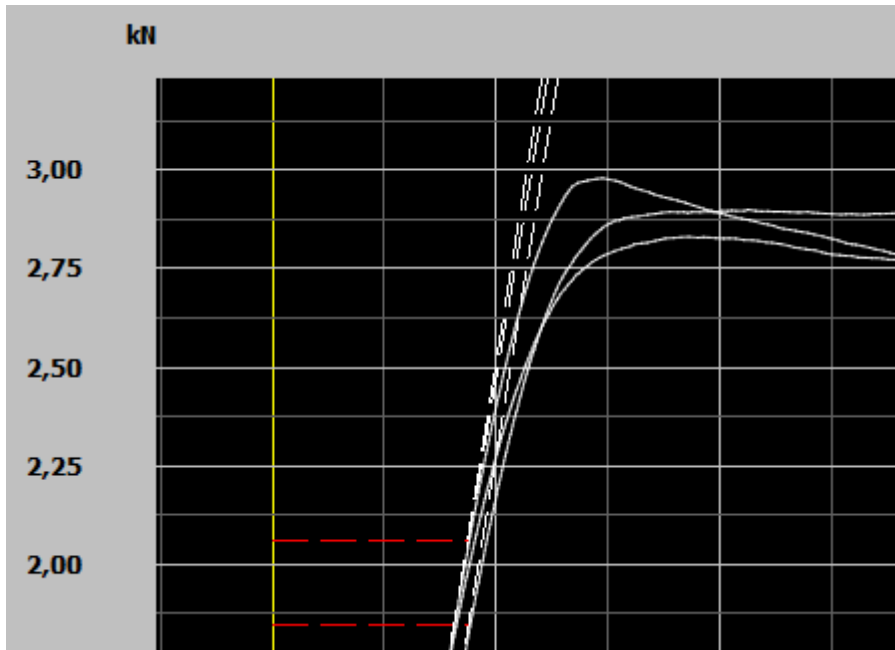
The screenshot shows the TRAM Quality Assurance System interface. At the top, there is a menu bar with options: File, Show, Edit, Setup, Calibration, Database, Language, Help. Below the menu are buttons for 'New set' and 'Clear filter', and a status indicator '2231/2231 sets: All'. The main area is divided into two calendar views for December 2011 and January 2012, with blue icons representing test sets. Below the calendars is a table with columns for 'Compression', 'Method', and 'EN 826'. The table contains test data for various samples, including production date, sample time, P-load, and sample length. At the bottom, a detailed test record is shown for sample 13, including density, deformation at P-load, and various stress values.

Compression	Method	EN 826
Production date	10-04-2012	Set creation timestamp
Sample time	09-04-2012 10:50	Lamella dir
P-load	5,0 kPa	Compression
Sample length	240,0 mm	Sample width
		Aged

id	Density kg/m ³	Deformation at P-load		σ_c kPa	σ_{10} kPa	σ_e kPa	
		mm	%				
13	66	1,0	0,7	*	39,14	25,56	2,
09	66	0,8	0,6	*	37,97	23,49	2,
71	62	0,9	0,6	*	36,94	28,57	2,

In the Calendar the sets of tests for the previous months are shown and here you can create new test sets.

In the top part of the Spreadsheet shared data for the individual test is visible (e.g. date, product information). The tests are recorded in the table below. The measurements, results and calculations displayed will be set to meet your individual requirements.



In the Graph you get a visual image of the test data, enabling you to quickly recognize irregularities in your test products.

TRAM-QA not only controls the testing of products, but also creates a dated Log Book, display results in a Spreadsheet with specific formulas for the type of sample tested. Furthermore it can generate extensive Post Test Analysis. It also contains an easy-to-use editor for programming your own Test- Sequences for non-standard samples.

A special feature of TRAM-QA is the facility to include conditions in the test sequence. Even the sample weight can be included in the condition. This feature makes it possible to do non-destructive proof testing as part of a strength-testing programme, thus saving material. The test-sequence can also be set up for repetitive loading to a chosen condition.

Recommended PC-specification

- 2Ghz CPU
- 2Gb ram
- 80Gb hard disk
- 100/1000MBit Ethernet Microsoft Windows XP / Microsoft Windows
- 7 Optical mouse

Specification

Test history Calendar, marked with tested sets of samples. The Calendar can be set to show only specific groups of tests using the filter property.

Test results Test results are shown in spreadsheets with calculations specific for each product or test type. Each type of product has its own layout for the spreadsheet, including set up, formulas and printing of data. This pattern is produced according to your design,

and in any language desired.

Testing of Sample

It is easy to set-up test sequences involving speeds (load, deformation etc.), load-cycling, various conditions etc. During testing an on-line curve e.g load/deformation is shown - together with the actual stage in the test.

Post Test facilities

Showing of test curves together with tangents for E-modulus, max. load, tolerances etc. Calculation on almost any parameter based on the curve. Spreadsheet of a set of tested samples where each line is a tested sample and calculated results. Both can be shown on the monitor, zoomed, and printed on paper or as a pdf-file.

Test Sequence Editor

Mouse controlled editor for making special Test sequence for controlling the machine. The Programming language contains selections and iterations. The commands for making the machine move are extremely versatile, and covers all possible needs.

Other facilities

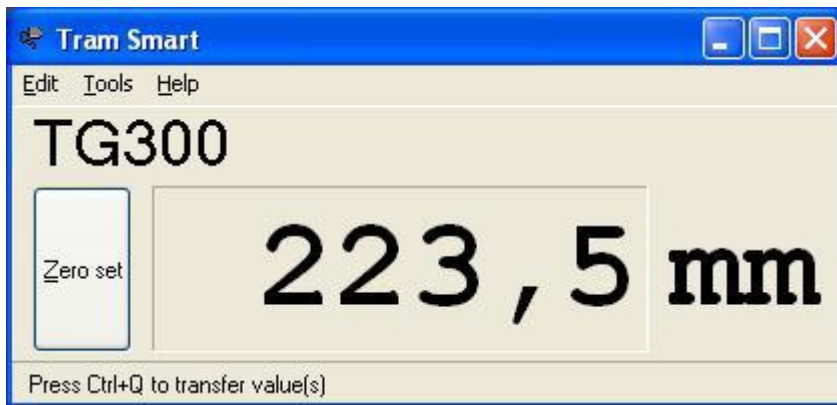
Calibration of the load cells and other transducers, fully software based.
Manual control of the machine with the PC keyboard.
Optional individual post-test analyses providing automatic data analysis.
Export of test results (tables and load/deformation curves) in a format, which can be read by virtually any spreadsheet or word-processor.
Optional import of weight to TRAM-QA from a balance through the RS232 connection.
Optional statistics-module enabling you to create control-charts of your quality data.
Optional import/export module to databases (refer separate brochure)

Tram Smart

TramSmart makes it easy and fast to perform and record a large number of measurements. It is a tailor-made interface between a serial (RS232) measuring device and any Windows Program (e.g. MS-Excel, Access). Depending on your choice of measuring device you will be able to record various types of data. You can record dimensions and dimensional changes with the LG210 & TT20, weight and weight changes with a Balance, thickness of special materials with the Laser Gauge TG300 etc. TramSmart can handle several devices at the same time.

The results of tests performed with each measuring device are transferred and recorded directly into e.g. MS Excel. This way typing errors or lost data are completely avoided and an accurate storage of all test data is obtained with minimum user-involvement.

To transfer the measurements, just set-up line/row jump for each measurement transfer. Push Ctrl+C (or set-up another keystroke that you prefer), and you are on your way.



The name of the chosen measuring device. The result is shown. Push the button to set the zero position. Press Ctrl+Q to transfer the value to any open Windows program.

Direct transport of data to MS Excel from certain devices with RS232 interface.

One-button measurement.

100% reliable, no more mistyping.

Set-up measuring line/row jump for each measurement transfer.

Fully compatible with Windows XP/Vista.

Available in YOUR language.

Can be used even on a portable PC

Requirements: * One available COM port