

Materials Testing System

Système de Contrôle des Matériaux
Materialprüfsystem

Compression

Bending

Tensile

Pipe & Tube

RFT 20..RFT 200 kN



Quality Assurance and Process Control

Specially designed for the plastic pipe industry, this universal compression/tension tester offers a unique solution for generating, filing and displaying quality data. It is built around a four-spindle testing machine, and it offers the user a fast and effective way of generating and presenting a quality report. Additionally it offers a data filing and retrieving system providing the user instant access to reports on any previously tested samples. Much more than just the strength test results can be included in the quality report. The **TRAM QA** software offers a simple way to incorporate all relevant quality parameters in a system of tables that can be set up for almost any application. It is ideally suited to quality assurance and process control as well as research and development. It is capable of performing a wide range of complex testing procedures and can be set up for relevant international or national standards.

The floor-mounted machine can be supplied with different stroke lengths. The special machine design provides optimum stiffness resulting in accurate deformation measurements. Testing is controlled from the computer after keying in sample identification. During the testing the load-deformation curve is simultaneously generated on the monitor. The machine is supplied with grips and loading plates to suit the products to be tested. Automatic positioning of the loading beam virtually eliminates the waiting time between tests. Additionally the system incorporates a facility to connect it to an external device such as a balance so that results can be directly transferred to system for further processing.



QUALITY ASSURANCE

Specification

MODEL	RFT 20 kN	RFT 50 kN	RFT 100 kN	RFT 200 kN
Max loading stroke length	1000 -3000 mm as standard			
Daylight between Columns	1200 mm as standard			
Max Loading-cell-force	±20 kN	±50 kN	±100 kN	±200 kN
Force measuring resolution	1 N			
Loading speed control	Selectable load- or travelling speed. Programmable loading sequence for semiautomatic testing as well as automatic fast return.			
Loading speed-range	0 - 300 mm/min as standard			
Deformation measuring resolution	0.01 mm as standard			
Supply voltage	230 V or 115 V, 50-60 Hz, with ground		3*400/230 V, 50-60 Hz, with ground	
Approx. weight (including control system)	1000 - 2000 kg			
Computer control system	PC with additional hard-and software, and printer. The TRAM QA software makes the testing, filing and analysing of data extremely versatile - refer to the separate brochure for the software.			
Data generation	<ul style="list-style-type: none"> • Real-time generation of load/deformation curve. Options for weighing samples in connection with the testing, and instant calculation of Breaking Load, Ultimate Deformation, Stress and Strain at Fracture, Stress at Proportionality limit, Modulus of Elasticity, Strain at Ultimate Load, Fracture Energy etc. • Up to 230 samples can be filed in each set, and additional data (example: weight/m², sample-width, density etc.) can be added to the set. A logbook is maintained on all data-sets, giving easy access to a specific set. 			
Data Presentation	The test results can be shown on the computer monitor or printed out in a table for each set of samples, together with, e.g. average and standard deviation values. Additionally a load deformation curve with all the specifics of a single test can be printed out. Various statistical analyses can be performed automatically, and results can be presented on the monitor or printed out in a number of different layouts according to your specification.			

Specifications are subject to change without notice.

An extraordinarily stiff frame construction, loading via a sealed ball-screw system and an accurate measure of the loading beam travel is the basis of the RFT-system. An IBM compatible computer with TRAM QA Windows software makes the machine a powerful "automatic" system for generating, filing and displaying quality data for many types of production. Simple to use software will enable the operator to grow familiar with the test machine after a very short time, even if he has no experience at all in operating a computer. The software is supplied in national languages as required.

Comprehensive electronic protection prevents the machine from overloading damage or driving out of limits. A simple calibration procedure is included in the software.

For operation in dusty environments the system can be supplied with the computer and printer in a sealed tower arrangement. The equipment offers a great opportunity to improve **quality management** through instantaneous data generation. In spite of the highly advanced and automatic testing procedure operation is easy. Due to the modular design of the equipment and the versatility of the software, tailored systems can be offered at a moderate price. Special systems for board, sheet and slab manufacturing industries can also be supplied.

Please contact TRAM or your local distributor for additional information.



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