

# Concrete Compression Tester

*Machine d'Essais pour Compression de Béton*  
*Prüfmaschine für Beton Kompression*

## CON 1 800...6 000 kN



3000 kN Universal Masonry and Concrete Tester

**Quality As-  
Process Control**

**urance and**

Designed for the Masonry and Concrete industry, the CON 1800-6000 kN offers a unique solution for generating, filing and displaying quality data. It is built around a specially designed testing machine, and it offers the user a fast and effective way of generating and presenting a quality report for masonry or concrete samples. Additionally it offers a data filing and retrieving system giving the user instant access to reports on any previously tested samples. Much more than just the compression test results can be included in the quality report. The TRAM QA software offers the user 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 e.g. EN 12394, EN772-1 and ISO 4012.

The special machine design provides optimum stiffness resulting in accurate deformation measurements, when the optional deformation sensor is used. 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 floor mounted. Automatic positioning of the loading head virtually eliminates the waiting time between tests.



## QUALITY ASSURANCE

# Specification

MODEL	CON 1800 kN	CON 1800 kN-Long	CON 3000 kN	CON 6000 kN
Max. piston travel	60 mm	215 mm	300 mm	300 mm
Vertical daylight opening	330 mm	305 mm	600 mm	600 mm
Horizontal opening	305 mm	305 mm	450 mm	750 mm
Error on force is less than 1% in the range	18 - 1800 kN	18 - 1800 kN	30 - 3000 kN	60 - 6000 kN
Max. piston speed (up/down)	60 mm/min			
Frame stiffness	Strain-test conformity according to EN 12390 Annex a, DIN 51302-2 Frame extension at full load is less than 1 mm			
Spherical seated top compression platen	Ø 216 mm	Ø 300 mm	420*520 mm	420*520 mm
Bottom Compression Platen	Ø 216 mm	300*300 mm	420*520 mm	420*520 mm
Loading speed control	Selectable load-speed (kN/min). Programmable testing sequence for semiautomatic testing as well as automatic fast return.			
Optional deformation device - resolution	0.001 mm			
Supply voltage	230V 50 Hz, max. 1.5 kW		3*400 V 50 Hz, max. 3 kW.	
Approx. height excluding table	970 mm	1100 mm	2100 m	2700 mm
Approx. weight	1000 kg	1200 kg	3500 kg	6000 kg
Computer control system	A PC with additional hard-and software. 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"> <li>Real-time generation of load/deformation curve. Instant calculation of Breaking Load, Ultimate Deformation, Modulus Of Rupture, Stress at Proportionality limit, Modulus of Elasticity, Strain at Ultimate Load, Fracture Energy etc.</li> <li>Up to 230 samples can be filed in each set, and additional data (example: weight, dimension, density etc. ) can be added to the set. A logbook is maintained on all data-sets, giving easy access to a specific set.</li> </ul>			
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 deflection 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, up-stroke loading via a hydraulic piston, and an optional accurate measure of the piston travel are the basis of the CON-system. A PC with TRAM QA Windows software makes the machine a powerful "automatic" system for generating, filing and displaying quality data for concrete productions. 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. A transparent fragment shield with a locking safety switch is also available.

Due to the modular design of the equipment and the versatility of the software, tailored systems can be offered at a moderate price.



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