

### Product Information Model 1547 Automatic Compression Test Plant ToniZEM

#### Application

The ToniZEM is designed according to DIN 51220 as well as DIN EN ISO 7500-1 as an automatic, servo-hydraulic machine of the accuracy class 1.

The ToniZEM is a single purpose compression test plant for efficient serial testing of cement, mortar and refractory samples such as prisms according to DIN EN 196-1 (40x40x80) mm, ASTM C109 (2x2x2)“ and BS 1881 (70.7x70.7x70.7) mm.

#### Advantages

- fully automated test plant with microprocessor and closed loop control by a servo valve
- designed as a space-saving compact unit
- installation - connecting - testing
- fully automatic with testXpert software, up to 99 test sequences storable within the ToniTROL
- two display indications for force (kN) and strength (MPa) with software testXpert (lbs)
- very simple parameter setting and operation
- future-proof by further software options (see product information ToniTROL, model 0510)
- optional software and printer for automatic raw data printing, alternatively PC with evaluation software testXpert or connection to LIMS through the software ToniDAT

#### Design / Working Principle

The test plant consists of the following components:

##### ToniNORM Powerbox, model 2014

for the pressure supply (see product information Powerbox, model 2010)

##### ToniTROL, model 0510.010

Computer controlled measuring and control system for fully automatic and programmable test performance (see separate product information ToniTROL, model 0510). Basic software for load controlled tests including the following functions: Programming of test sequences like F/ t load up to fracture of samples, fracture detection with adjustable sensitivity.

Possibility to enter dimensions and weight of samples as well as sample identification numbers.



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##### Load frame 300kN, model 1547.0300

with DMS precision load cell for compression tests .Two-column compact frame with a vertical plunger drive. Directly integrated hardened pressure plates.

##### Test area protection

test area protection with electromechanically locking, made of Macrolon panes and aluminium profiles (requested within the EU for the CE conformity)

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#### Optional Accessories

##### Manually bending tool 1543.020

for dividing prisms 40 x 40 x 160 mm into halves, mounted on the housing of the Powerbox.

For further information please contact:

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#### Available Pressure Plates

Size	Material	Model
40x40 mm	hardened steel	1543.011.1
40x40 mm	tungsten carbide	1543.011.2
40x62,5 mm	hardened steel	1543.012.1
40x62,5 mm	tungsten carbide	1543.012.2
70,7x70,7 mm	hardened steel	1543.010.1
50x50 mm	hardened steel	1543.013
Size according ASTM C 109		1543.009
upper pressure plate Ø 79,4 mm	hardened steel	
lower pressure plate Ø 74,0 mm	hardened steel	

Technical Data		
Maximum test load	kN	300
Measuring range, Class 1	kN	3.0 ..... 300
Pressure plate distance by 40x40x40 mm	mm	60
Pressure plate distance by 70.7x70.7x70.7 mm	mm	80
Piston stroke	mm	30
Distance between columns	mm	210
Elektrical connection		
Voltage *	V	3x 230 / 3x 400
Frequency	Hz	50 - 60
Power	kW	1,8
Working height	mm	1050
Required space (wxdxh)	mm	700x775x1350
Weight gros / net	approx. kg	500 / 380