

**QUALITEST**  
ADVANCED TESTING TECHNOLOGIES



Member of  
**(WORLD  
of TEST)**

[WORLD of TEST.com](http://WORLDofTEST.com)

**QUALITEST™**

## Concrete Creep Tester (Standard Model)



## STANDARDS

---

ASTM C512

ASTM C512M

ISO 1920-9

## Concrete Creep Tester (Standard Model) - QualiCCTR™ Basic Series

A Concrete Creep Tester measures time-dependent deformation of concrete under a sustained compressive load. The QualiCCTR™ (Standard Model) Series is a long-term loading frame system built to test concrete cylinders or prisms under constant pressure load over time, helping labs quantify creep deformation in a controlled environment.

QualiCCTR™ Series applies a stable, sustained compressive load using a reaction frame and spring-based loading assembly. The standard configuration uses dial indicators for deformation readings, making it a practical option for construction labs, universities, and QC teams that need reliable creep measurements without a full data acquisition package.

The system is intended for single-direction compression creep testing at controlled temperature conditions in a low-humidity (humid-free) environment. Load is applied through a hydraulic jack and pump unit, then maintained through the loading frame for long-duration monitoring.

## APPLICATIONS

---

## Concrete Creep Tester (Standard Model) - QualiCCTR™ Basic Series Applications

- Long-term creep deformation evaluation: Tracks deformation under sustained compressive stress to support structural design checks, material selection, and performance benchmarking of concrete mixes.
- Research on mix design and additives: Compares creep behavior across cement types, SCMs, admixtures, aggregates, and curing regimes for R&D and academic studies.
- Quality control for critical pours: Helps validate consistency for projects where long-term deformation matters, such as columns, transfer structures, and mass concrete elements.
- Training and teaching laboratories: Provides a clear mechanical method for demonstrating sustained-load behavior and time-dependent strain measurement.



## Standards

- ASTM C512/C512M — Standard Test Method for Creep of Concrete in Compression (molded cylinders under sustained longitudinal compressive load).
- ISO 1920-9:2009 — Testing of concrete: Determination of creep of concrete cylinders in compression.

## FEATURES

---

### Concrete Creep Tester (Standard Model) - QualiCCTR™ Basic Series Key Features

- Standard dial-indicator configuration: Supports long-term deformation tracking with a simple measurement setup and clear visual readings.
- Sustained-load creep frame design: Built for constant pressure loading of concrete cylinders or cuboid specimens over time.
- Hydraulic loading package: Uses a hydraulic jack and pump unit for applying load and adjusting pressure during setup.
- Multi-specimen reaction frame: One reaction frame can be configured to test up to three cylindrical specimens (150 × 300 mm listed), with custom options available.
- Spring-based load holding: Spring assemblies (disc spring for TXB-1000; compression spring for TXB-500) are used to help maintain stable sustained loading.
- Upgradeable pathway to automated monitoring: A premium configuration is shown with displacement sensors and data acquisition for labs that want automated logging later.

## THEORY & METHOD

---

## Theory and Method

Creep is the time-dependent strain that develops while concrete is held under a constant compressive load. The test prepares standard specimens, applies a target sustained stress level using the loading frame and hydraulic jack, and records deformation at defined time intervals for days to months.

The standard model reads deformation using dial indicators mounted on the creep frame. Load stability is maintained through the frame's spring assembly and controlled pressurization, allowing long-duration monitoring without frequent readjustment.

## TECHNICAL SPECIFICATIONS

---

### Concrete Creep Tester (Standard Model) - QualiCCTR™ Basic Series Technical Specifications

Specification	QualiCCTR™ Basic 500	QualiCCTR™ Basic 1000
Maximum testing force	500 kN	1000 kN
Measurement range	0-500 kN	0-1000 kN
Pressure relative error	±1%	±1%
Jack stroke	100 mm	100 mm
Compression space	1500 mm (max distance between platens)	2500 mm (max distance between platens)
Specimen size (examples listed)	Cylinders: Ø150 × 300 mm (frame supports up to 3 pcs stated)	Cylinders: Ø150 × 300 mm (frame supports up to 3 pcs stated)

<b>Specification</b>	<b>QualiCCTR™ Basic 500</b>	<b>QualiCCTR™ Basic 1000</b>
Spring type / height	Compression spring; 300 mm height; 52 mm stroke	Disc spring; 50-52 mm stroke
Voltage	380 V, 50 Hz	220 V, 50 Hz (110V is also available)
Frame / package dimensions	Load machine: 300 × 200 × 1150 mm; Inside: 1000 × 600 × 1000 mm	Package: 750 × 750 × 2800 mm
Approx. weight	About 800 kg (net)	1200 kg (gross)



ADVANCED TESTING TECHNOLOGIES

USA | CANADA | UAE | GCC | EU | INDIA | APAC | AFRICA | LATIN AMERICA

## Connect with us

Contact our **QualiTeam** today to find out how we can help your organization **select the most suitable testing solution** for your application, requirements, and budget.

### Qualitest USA (Corporate Sales Office)

Toll-Free: 1.877.884.TEST (8378) | Fax: 954.697.8211  
E-mail: [info@qualitest-inc.com](mailto:info@qualitest-inc.com)  
Address: 8201 Peters Rd., #1000,  
Plantation, FL 33324, USA.

### Qualitest Canada & International

Tel: +1.905.944.9825 | Fax: +1.905.944.0304  
E-mail: [sales@qualitest-inc.com](mailto:sales@qualitest-inc.com)  
Address: 70 East Beaver Creek Rd., #9, Richmond Hill,  
Ontario L4B 3B2, Canada.

### Qualitest Latin America (Mexico and LATAM Region)

E-mail: [ventas@qualitest-inc.com](mailto:ventas@qualitest-inc.com)

### Qualitest KSA (Regional Office)

Tel: +966 11 500 6659  
Address: Level 7, 3.09, District 3, King Abdullah  
Financial District, Riyadh, Saudi Arabia

### Qualitest Singapore (ASIA PACIFIC Regional Office)

Tel: +65 6393 5480 | E-mail: [singapore@qualitest-inc.com](mailto:singapore@qualitest-inc.com)  
Address: 50 Raffles Place, Singapore Land Tower,  
Level 46, Singapore, 048623.

### Qualitest Indonesia (Representative Office)

Tel: +62 21 2985 9522 | Fax: +62 21 2985 9889  
E-mail: [indonesia@qualitest-inc.com](mailto:indonesia@qualitest-inc.com)  
Address: One Pacific Place Level 11, Jl. Jend. Sudirman,  
Kav. 52-53, SCBD Area, Jakarta 12190, Indonesia.

### Qualitest FZE (Regional GCC/ME Office)

Tel: +971 4 8819252 | Fax: +971 4 8819262  
Email: [gcc@qualitest-inc.com](mailto:gcc@qualitest-inc.com)  
Address: Jafza One, BB 1610, Jebel Ali Free Zone,  
PO Box 261440, Dubai, UAE.

### Qualitest India

E-mail: [india@qualitest-inc.com](mailto:india@qualitest-inc.com)  
Address: 15th Floor, Dev Corpora, Pokhran Road No.1,  
Eastern Express Highway, Thane, Maharashtra,  
Mumbai, 400601, India

