



CEMENT STRENGTH TESTER

# CemTest

- ✓ **NON-DESTRUCTIVE**
- ✓ **TIME EFFICIENT**
- ✓ **COST EFFECTIVE**



10:33:09 Fri Sep 15  
Density of Cement (g/cm<sup>3</sup>): p = 2.8  
Fineness of Cement (%): P = 4.0  
Consistency of Paste (%): H = 22.0  
Additive Size (%): D = 0.00  
Additive Type: v = 1.0  
Water/Cement Ratio: Z = 0.45  
Hardening Temperature (°C): t = 20  
Hardening Time (days): T = 28

CemTest

# CST INSTRUMENTS LIMITED

CST is a UK-based company, introducing new innovative instruments for the accelerated testing of cement and freshly mixed concrete for its compressive strength.

Our instruments can assist with the traditional testing methods to determine at an early stage the quality of products.

## APPLICATION

The CemTest tests the compressive strength of cement determined with the following parameters:

Rcomp – Compressive strength

Rflex – Flexural strength

Rflex oil – Flexural strength for oil wells

## TESTING

Our instrument works by measuring the electrical conductivity characteristics of a cement mixture during the early hydration period (first 60 seconds) using a purposely designed measuring probe.

The instrument will prompt the user to enter key parameters from the manufacturer's product data sheet to calculate the cement strength.





# BENEFITS.

- Predicts the compressive strength of cement samples in minutes
- Non-destructive testing
- Significant savings in time, resources and costs
- Multiple tests can be performed on the same sample by varying the key parameters
- Accelerate the research and development of new cement blends

# KEY FEATURES

- Lightweight, handheld with clear 2.5" LCD display
- Results are within +/- 7% tolerance of BS EN196-1 standards
- Simple user-friendly interface
- Data logging and USB transferrable results



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## TECHNICAL SPECIFICATIONS

Cement Range	Portland cements CEM-I, CEM-II
Dimensions	Length: 200 mm Width: 95 mm Height: 39.5 mm
Case Material	ABS (UL 94 HB)
Case Protector	Absorbs shocks and so protects the electronics in the case
Electromagnetic Shielding	EMC (ALVACOAT®) Protection against electromagnetic radiation
Display	LCD Colour 2.5" / 20x320 pixels
Memory	Up to 100 test reading
USB Port	Used to transfer test results to USB stick
Battery	Lithium-ion, 3.7V, 1100 mAh
Battery Lifetime	>12h (in standards operation mode)
Mains	5V / 5A
Weight	335g
Operating temperature	0°C -30°C (Charging, running instrument) 0°C -40°C (Charging, instrument is off) -10°C -50°C (Non-Charging)
Humidity	<95 % RH, non-condensing
Standards and Directives	ROHS compliant REACH compliant EMC certification ESD certification CE certification
CemTest Kit (Supplied in carry case)	CemTest instrument, Measuring Probe, USB Stick, USB Charging Cable, Digital Scales, USB Plug, Plug Adapter, Stiring Spoon, Beaker

## WARRANTY AND SERVICES

Our instruments are supplied with a 12 month product warranty, and we provide full aftersales and troubleshooting services for our customers.



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