



## James Cementometer

**A microwave meter for rapid determination of moisture content in wet cement and concrete.**

### **Features and Benefits**

- Fast and easy to use; simply insert the prongs into the material being tested
- Accurate
- Completely Portable
- Full range of water cement ratio's  
Instantaneous readings

## Technical Specifications



**Cementometer Type R**



**Cementometer Type L**

**NDT** JAMES INSTRUMENTS INC.  
NON DESTRUCTIVE TESTING SYSTEMS

The James Cementometer represents a break-through in modern moisture measurement technology. By utilizing the latest microwave and microprocessor science, the Cementometer can determine the moisture content of freshly mixed cement, concrete, and mortar. Simply insert the prongs of the probe into the material to be measured and instantaneously the water cement ratio is shown on the easy to read display.

The Cementometer Microwave moisture meter uses a two prong sensor to measure the complex dielectric constant of the material in contact with the prongs. As the dielectric constant of water is four to eight times greater than most aggregates and cements, changes in water content directly effect the sensor output. An average of five to ten readings is normally taken in order to ensure a valid reading. This output is then converted by the integrated microprocessor and moisture content is displayed directly.

Two units are available to encompass the full range of water cement ratio's found in wet concrete. The Cementometer Type R handles normal water cement ratio's with its two prong probe. The range of this instrument is approximately 0.35 to 0.65 water/cement. Cementometer Type L handles low water/cement ratio's with its five prong probe. The range of this instrument is approximately 0.25 to 0.5 water cements.

The units come calibrated for standard type I, II, and III cements. It can also be programmed with up to ten different mix design by the user. For highest accuracy, the user should program the unit for the material being used. The Cementometer Type R has simple to use calibration process that rapidly creates the user programs without the need for external computing devices.

Finally, the Cementometer can store over 150 readings. Storage is complete with the time and date for future reference. Data can be recalled via RS-232 interface to a personal computer running WIN95/WINNT.

### Specifications:

T-C-10	Cementometer Type R for regular water cement ranges
Water Cement Ratio Range:	approximately 0.35 – 0.7
Power:	4AA Batteries
Display:	2 x 16 Char. Trans - reflective
Data Link:	RS-232
Weight:	approximately 4 lbs (1.8 kgs)
T-C-20	Cementometer Type L for low water cement ranges
Water Cement Ratio Range:	0.25 – 0.5
Power:	4AA Batteries
Display:	2 x 16 Char. Trans - reflective
Data Link:	RS-232
Weight:	approximately 4 lbs