

DEVICE DESIGN

PHYSIC & CHEMISTRY

RHEOLOGY

ZETA POTENTIAL

COLLOÏDS & INTERFACES

CEMENT, MORTAR & CONCRETE

MULTICAD: MULTI-SAMPLE CONTROLLER FOR MONITORING THE ELECTRIC CONDUCTIVITY OF CEMENT SUSPENSIONS, SLURRIES AND PASTES



The **MultiCAD** includes a set of adapted cells corresponding to the study of liquid suspensions, pastes or mortars.

The electrical conductivity is monitored using an external multiplexer and only one conductivity meter. A menu driven software for PC compatible is used to set independently parameters of each cell, plot the signal curves and archive data on format compatible with usual Excel[™] spreadsheet.

Applications

- > Kinetics of cement hydration.
- Study of hardening process of oil well cement slurries.
- Monitoring of structural changes occurring within the paste during hydration.
- Characterization of secondary effects of cement additives.
- Effects of mineral additives on the *electrical* conductivity of hardening cement paste.
- > Study of fillers reactivity.
- Measurement of connectivity of the moisture inside pores within drying cement paste.
- > Monitoring sol-gel reaction.



PAP cell model for Pure Pastes.

The conical design of special pasta cells model PAP is particularly convenient for removing the sample after setting. Also exist for mortars samples



CEMOT40: cell for liquids and diluted suspensions. Stirring is carried out by a 24V DC motor. Double jacketed vessel for temperature control.

Model shown: MonoCAD





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