

# Capillary Suction Timer



**Brand:** OFI Testing Equipment, Inc.

**Product Code:** 294-50

**Availability:** 5

**Lead Time:** 21

## Description

The capillary suction time test was developed at the Water Pollution Research Laboratory in Stevenage, England, for studying the filterability of sewage sludge and for evaluating the effects of pre-treatment chemicals and process conditions of sewage treatment. It has been widely used to study the colloidal properties of clay suspensions. The petroleum industry uses the Capillary Suction Timer to characterize shales and to optimize the electrolyte concentration in drilling fluids for minimizing its effect on shale formations.

## Industry Uses

### Wastewater Treatment

- Mechanical dewatering of thickened slurries from sedimentation basins and filter backwash
- Conditioning of surface and subterranean water in potable water
- Clarification of filter backwash water and thickening of hydroxide slurries from sedimentation basins

### Sewage Plants

- Dewatering of raw sludge, digested sludge, and waste-activated sludge on drying beds, rotary vacuum filters, vacuum belt filters, decanter centrifuges, and plate/frame filter presses
- Thickening of biological sludge prior to addition of primary sludge
- Thickening of sludge in Dissolved Air Flotation (DAF) systems

- Improving separation efficiency in mechanical pre-clarification processes

## **Petroleum Industry**

- Borehole stabilization to determine the best electrolyte and polymer to use for maximum shale swelling inhibition
- Evaluating colloidal shale properties to study the reduction of permeability of the formation around the wellbore
- Evaluating the effects of soluble salts and polymers on cuttings

## **Features**

- Digital - readouts have higher accuracy
- LCD Display - makes measurements easy to read

## **Technical Specifications and Requirements**

- Power Requirements - 9-Volt Battery
- Size: 10" × 4.75" × 2" (25 × 12 × 5 cm)
- Weight: 1 lb 8 oz (.68 kg)

## **Components**

- #147-02: Battery, 9 Volt, Alkaline
- #294-01: CST Paper, Standard, Chromatography Grade, Whatman 17, 7 cm × 9cm, Box of 100
- #294-50-004: Spacer, Nylon
- #294-50-006: Cable Connector
- #294-50-007: Battery Connector
- #294-50-011: Lower Block
- #294-50-012: Electrode
- #294-50-013: Support Rod
- #294-50-014: Terminal Cover
- #294-50-015: Power Supply
- #294-50-017: Plug Adapter for Power Supply
- #294-50-021: Upper Block Assembly

## **Optional**

- #294-05 CST Paper for very viscous or slow filtering systems, Box of 300

## **Part Number**

- #294-50