

Visualize the solids / liquid separation capabilities of activated sludge

DILUTION TEST IS SIMPLE AND POWERFUL FOR PROCESS CONTROL



SLUDGE CONCENTRATION ISSUE

Settleometer above left at 50% dilution. Settleometer above right not diluted.

The greater the difference in the first 2 minutes, the more likely there is too much solids in the aeration tank.

Diluted settleometer settles properly.



SLUDGE DENSITY ISSUE

Settleometer above left at 50% dilution. Settleometer above right not diluted.

Even with dilution, the unit on the left fails to settle. May indicate filaments.

The Raven Settleometer Kit is used to evaluate sludge settling characteristics.

Use with mixed liquor samples to determine the behavior of the sludge in the secondary clarifier.

Also with aerobic digester samples to evaluate supernatants and separation periods for sludge wasting.

Each kit is shipped with the following items:

- C-10100 Settleometer, 1.4 liter cylinder
- C-10103 Mixing Paddle
- C-10104 Snap-on Lid

Shipping weight is 1 lb. 4.5" diameter X 8.5" tall.

Settleometers are used to determine percent (%) volume and/or settled sludge volumes (SSVs) for quantifying settling of sludge samples. Used in conjunction with aeration tank mixed liquor concentrations by volume (ATCs - obtained from the Centrifuge Test) the SSV data can yield Settled Sludge Concentration (SSCs) at respective times. When compared to the return activated sludge concentration by volume (RSC), a powerful process control tool is provided for return sludge flow control.

"The results obtained from the settleometer and centrifuge tests can be combined and used to adjust proper return sludge flow to minimize clarifier sludge detention while maximizing clarifier sludge concentration. This type of operational information demonstrates the superiority of settleometer testing in comparison to simple use of SVI (sludge volume index)."

Activated Sludge Manual of Practice OM-9 first edition page 171.

West, A.W. "Updated Summary of the Operational Control Procedures for the Activated Sludge Process" US EPA, Cincinnati, OH



DESCRIPTION
Settleometer Kit

ITEM #
C-10102