



## Flocculation Tester (SMT-EE-01)

Flocculation and coagulation are preliminary tests prior to designing a water or waste water treatment plant. Jar tests are routinely used for the control of plant operations and they serve to indicate the optimum chemical dosages for removal of turbidity and colour, necessary pH adjustments and the supplemental use of activated carbon. Jar tests yield a wealth of evaluation of agglomeration rate as a function of energy input (paddle speed), settle ability of the floc formed and the clarity of supernatant water (which might be related to the subsequent length of filter run). Coagulation and flocculation tests may be used, in conjunction with other tests, to study basic processes, e.g. the kinetics of reaction, filterability index and the removal of trace constituents from aqueous solutions.

### TECHNICAL SPECIFICATIONS

#### Specifications:

- Continuously variable stirring speed
- Digital display
- Height adjustment of the Stirring blades during operation
- Timer feature

#### Experimental Data:

- Determination of optimum coagulant dosage.
- Study of floc formation based on mixing time and the agitation speed variation.
- Determination of optimum pH.
- Coagulation test in conjunction with activated carbon.
- Effect time and intensity of mixing on aggregation.
- Coagulation tests in conjunction with filterability tests.
- To study the kinetics of reaction, filterability index and the removal of trace constituents from aqueous solutions via Jar Test.

