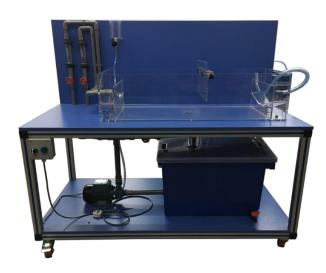
# **SEDIMENTATION TANK**

# Model Number: GOTT-STANK-018



### **DESCRIPTION**

This GOTT-STANK-018 has been designed to demonstrate the hydraulic characteristics and settling efficiencies of a model settling basin. Although scale-up to industrial size sedimentation tanks is difficult, relevant deductions can be made as to how non-uniform flows occur and how these interact with the settling characteristics of particular suspensions.

#### **FEATURES**

Water is taken from the laboratory mains supply and is fed to the settling tank via a flow meter. For studies of sedimentation, a slurry is prepared in a sump tank and pumped via a specially designed flow meter to join the fresh water stream just before entry to the settling tank. A well-mixed slurry of known concentration and flow enters the tank uniformly under an inlet weir.

This may be comparatively analysed by the Imhoff cone technique or more accurately by drying and weighing. The sump tank is continually agitated by a flow sparge device to prevent settling of solids during an experiment. For hydraulic tracer and visualisation studies, an accurate dye injection system is provided. A known volume of dye solution is injected just before the entry to the settling tank.

### **DEMONSTRATION CAPABILITIES**

- Measuring flow short-circuiting and dead space using a tracer
- Comparison of real flow regimes with idealised flow models
- Effect of flow rate and baffle position on dispersion
- Measuring sediment removal efficiencies and relating these to the hydraulic characteristics.

## **TECHNICAL DETAILS**

Settling tank :1000 x 400 x 200mm

Sediment sump tank capacity :120 litres Water flow meter range : 0.5-5 I/min Sediment suspension flow meter range : 0-2 l/min

Pump flow rate : 25 I/min at 5m head

Motor : 0.1kW

# Manuals:

- (1) All manuals are written in English
- (2) Model Answer
- (3) Teaching Manuals

# **General Terms:**

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

#### Warranty:

2 years

### **ORDERING INFORMATION:**

ITEM	MODEL NUMBER	CODE
SEDIMENTATION TANK	GOTT-STANK-018	