

## Open channel with variable slope

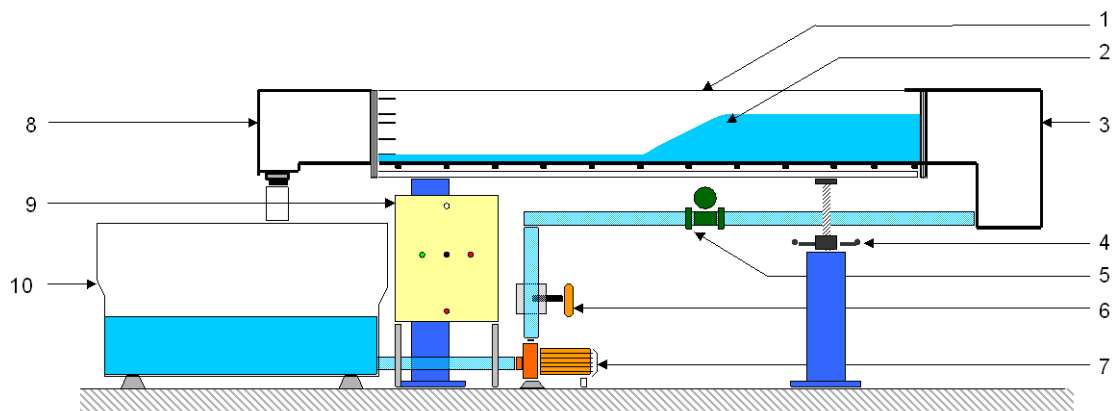
### DESCRIPTION

- v This bench is composed of a transparent open channel section, centrifugal pump, a flowmeter, a stocking tank and two reassuring area.
- v It is possible to put many types of overflow and accessories on channel.
- v Hand operated slope.
- v The pump is piloted by an AC drive.
- v Demonstration of fluvial or torrential flow.
- v Measurement of level with limnimeter.
- v This unit is designed and manufactured to industrial standards.



### SUGGESTED LESSONS

- Study of open channel system
- Study of a fluvial flow
- Study of a torrential flow
- Influence of the channels slope
- Study of different overflows
  - overflow with wall and without lateral contraction
  - overflow with wall and lateral contraction
  - overflow with triangular wall
  - overflow with thick doorstep
- Calculation of flow
- Visualisation of flow



## TECHNICAL DETAIL

### **1.Open channel**

Transparent walls

Section : 160X340mm

Length : 4000mm

The canal is composed of mobile limnimeter to measure the depth

### **2.Overflow site**

Supplied overflows :

-overflow with wall and without lateral contraction

-overflow with wall and lateral contraction

-overflow with triangular wall

-overflow with thick doorstep  
in option many overflow

### **3.Measuring tank upstream**

Beige polyethylene tank

Low emptying tank

### **4.Mechanic slope system**

Screw system

Manual activating

A slopometer show slope point of view

### **5.Debimeter**

Electromagnetic flowmeter

Local digital posting

### **6.Regulation valve**

ball valve

### **7.Circulation pump**

Centrifugal Moto-pump

Maximum flow : 150m<sup>3</sup>/h

The pump speed is piloted by an AC drive with manual command

### **8.Measuring tank downstream**

Beige polyethylene tank

The flow goes directly in the stock tank

### **9.Electric cabinet**

with following controls :

-general shut down

-mains on led

-on/off pump

-potentiometer for speed adjustment

-emergency stop button

### **10.Tank of stock water**

Green fiber tank

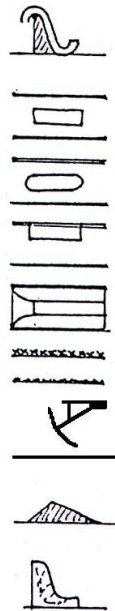
Transparent cover

low level sensor

Volume : 550L

## OPTIONS :

Siphon
Rectangular support
Shaped support
Narrowing partial
Venturi channel
Rough radiers
Barrage with segment
Prismatic overflow
Overflow



## INSTALLATION VOLUME

Length : 5000 mm  
Width : 1000 mm  
Height : 1 500 mm  
Weight : 350 kg (empty)

## UTILITIES

Electric : 230VAC Single phase -20A-50Hz  
Water : 500L