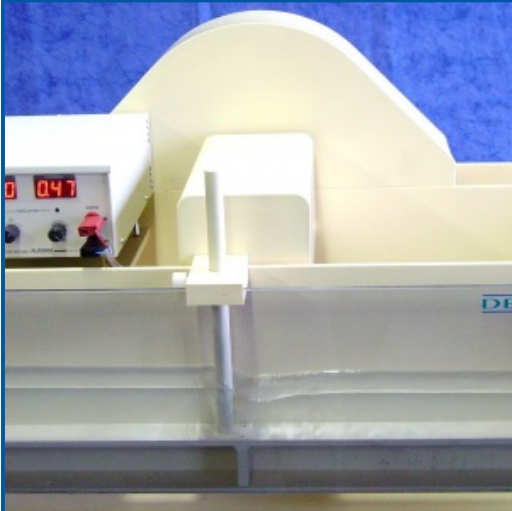


VISUALIZATION AND STUDY CHANNEL OF SEDIMENT TRANSPORT



Non contractual photo

**SERVICE : POWER SUPPLY: 220 V SINGLE
PHASE 50 HZ
DIMENSIONS : 1100 X 500 X 450 MM / TEST
CHANNEL: 600 X 50 X 150 MM
WEIGHT : 66KG**

REFERENCE : EH310

Visualization of free surface flows allows an approach to hydraulic phenomena caused by obstacles (bridge pile, sill, valve) encountered in watercourses and canals. Sediment transport is a complex phenomenon that occurs in most rivers and canals. It reflects the movement of bed material in a flow, from the thrusting of large pebbles into mountain torrents to the suspension transport of fine clay particles along rivers. A good understanding of these phenomena and their consequences is essential in areas such as geology, hydrology, irrigation, etc ... :

- Study of the two modes of transport, thrusting and transport by suspension
- Study of the evolution of the transport according to the speed and the height of the flow
- Study of the effect of various obstacles on the slab, valve, cylindrical profile
- Visualization of flows

Technical specifications :

The Sediment Transport Visualization and Study Channel is a simple and effective means of observing the two transport modes of thrust and suspension transport as well as the visualization of flows over and around obstacles, or totally immersed. This device also allows the study of the movement of various materials according to their size and their environment (flow velocity, obstacles ...) The installation includes a closed-circuit channel with a free surface with a double bottom to store sediments. Adjustable feet allow the channel to be leveled. The sediments are arranged in the double bottom of the test vein, made of transparent material for good visualization of the phenomena studied. The canal water is driven by a disc wheel itself driven by a variable speed gear motor (from 0 to 40 rpm). This device ensures a good distribution of the flow over the entire speed range.

A removable floor allows, in the case of use in visualization channel, to cover the material compartment and fix the obstacles (threshold, spillway, etc ...). Several profiles and a bottom plate delivered with the device multiply the possibilities of experiments of the channel. Two protective covers isolate the motor part of the installation.

Accessories supplied with the channel :

Sediment transport : Support with a cylindrical profile and a flat valve, and a bag of material (sand)

Visualization : A wide-walled threshold; Thin walled threshold