

## **FLUID MECHANICS**



## MINIATURE CHANNEL FOR FLOW VISUALIZATION



**DL DKL162** 

The miniature channel for flow visualization allows the observation and studying of the behavior of fluids in open channels and the flow lines formed around different submerged objects.

The operating mean for the experiments is the fluid water. Putting diluted ink into water, the flow lines can be visible. This combination of elements together with the transparency of the channel allows an optimal observation of the flow lines.

Although the shape and size of the system are tailored for the DL DKL014, it can also be used stand alone.

Different bodies of dump and profiles by various forms are supplied.

#### **TRAINING OBJECTIVES**

- Basic study of the flow channels
- Observation of the flow lines around bodies such as:
  - o Thin wall weir
  - o Thick wall weir
  - Aerodynamic symmetrical profile
  - Aerodynamic asymmetric profile
  - Small cylinder
  - o Large cylinder

#### **TECHNICAL DATA**

#### Tank:

- Service mean: water
- Admission tank: approx. 9 liters
- Color used: ink
- Ink nozzles: 5
- Useful channel dimensions: (L x W x h): 600x615x150mm
- General dimensions: (L x W x h): 820x670x750mm

#### Submersible bodies:

- Thin wall weir (10x15x65mm)
- Thick wall weir (115x15x65mm)
- Aerodynamic symmetrical profile
- Aerodynamic asymmetric profile
- Small cylinder
- Large cylinder



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## **Necessary accessory:**

## DL DKL014 - Hydraulic bench

The basic hydraulic bench is a simple, mobile, self-contained module that allows a supply of "hydraulic energy", i.e. an accurately controlled and measurable flow of water.

It includes two collecting tanks, a centrifugal pump, a flowmeter, a mobile frame work on wheels, a set of valves and piping.

