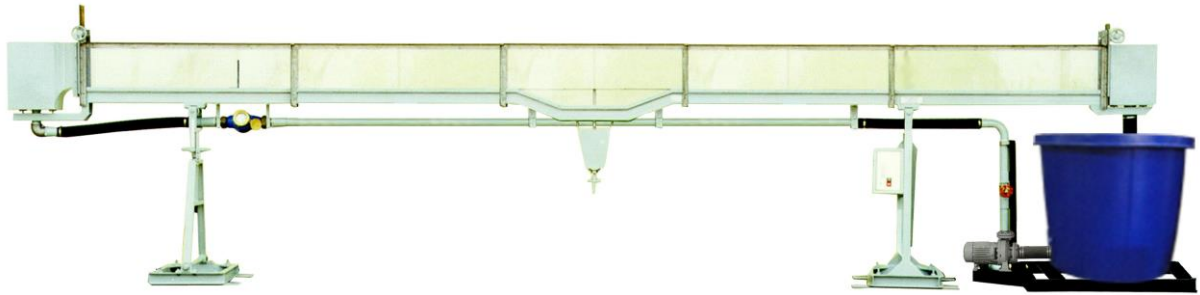


HF 515A TILTING FLOW CHANNEL, 150 mm wide, Adjustable bed.



INTRODUCTION

The settlement of river water sediments over a long period of time results in a shallow river bed. Occasional dredging may be required to deepen the river bed for navigation purpose. The adjustable bed flow channel allows a study of flow under the simulated shallow and deepened river bed.

GENERAL DESCRIPTION

This is a self contained open channel designed for studying flow phenomena with change in bed slope. It is to be used with optional accessories and models below.

The channel is of rectangular cross section supported by rectangular steel frame. Side walls are transparent to allow full observation and are supported by adjustable steel brackets to ensure accurate wall alignment. Tilting can be adjusted by a manual screw jack. The middle section of the bed can be adjusted manually upward or downward by a screw. A head tank with a stilling baffle provides a smooth flow and water is returned to the storage tank via an end tank. Models are attached to the top edges or bed of the flume by screws. Screw holes at the bed can also be used for pressure tapping to measure pressure loss along the channel length.

TYPICAL TESTS

- Open channel flow.
- Flow measurement.
- Hydraulic jump.
- Continuity and energy equations.
- Discharge under sluice gate.

TECHNICAL DATA

- Channel size : 150 mm wide, 350 mm high and 6 m long or as required.
- Tilting adjustment : -1 % to + 3 %.
- Side walls : Clear acrylic or tempered glass with clear vertical scale.
- Channel bed : Stainless Steel.
- Bed adjustment : Upward and downward.
- Head tank : Stainless steel.
- End tank : Stainless steel.
- Sluice gate : Stainless steel, built in at downstream end of the channel.
- Flow measurement : Water meter.
- Power supply : 220V 1Ph 50 Hz. Other power supply is available on request.

OPTIONAL ACCESSORIES AND MODELS

- Measuring tank and a stop watch.
- Stainless steel hook and point gauge.
- Weirs : V-notch weir, rectangular notch weir, sharp crested weir, broad crested weir, crump weir, trapezoidal weir.
- Ogee weir.
- Dam spillway with different interchangeable downstream sections.
- Syphon spillway.
- Bridge pier, round or square.
- Culvert fittings: round or square edge.
- Vibration pile.
- Venturi flume.
- Sluice gate.
- Radial gate.
- Pitot tube with manometer board.
- Current meter.
- Roughened bed, gravel, sand, or corrugated.
- Wave generator.
- Motorized tilting.
- Absorbing beach, plain, roughened, or permeable.

Net (unpacked) shipping dimensions WxLxH : 100 x 700 x 160 cm
Net weight : Approx. 620 kg