

IMPACT OF A JET APPARATUS



Experimental capabilities

- Study of jet forces
- Comparison of the force exerted by a jet on a hemispherical surface 180°, flat or conical 120°
- Influence of the diameter of the nozzle
- Influence of variation in deflection angles
- Study of the relationship between the flow of water (impact speed) and the force exerted on the obstacle

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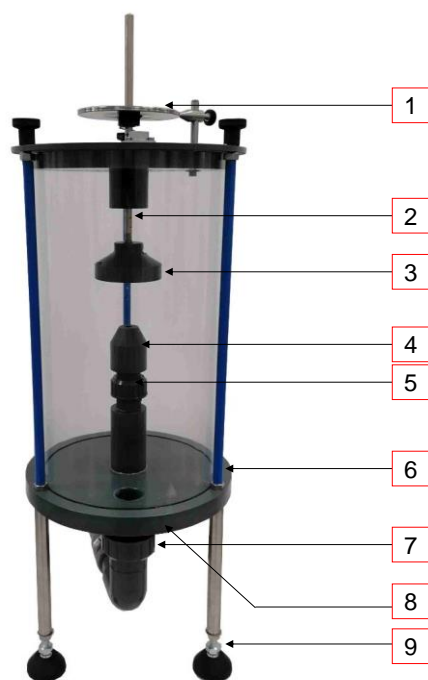
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As part of the continuous improvement of our products, this technical specification may be modified without previous notifying

Operating principle

The PBJ100 unit allows the study of the impact of a jet on different obstacles.
The water enters through the bottom of the device through a nozzle of known diameter and is directed to an obstacle.
The impact force of the water on the obstacle is measured using a weight on the axis of the obstacle.
The water is then returned to evacuate through the bottom.
Students will adjust various flow rates and measure the force applied to each nozzle combination and obstacle.
The robust design of this device makes it suitable for use in schools.
The materials used are resistant to corrosion.
This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Illustrations



Technical details

1. Load mass for measuring the force applied on the obstacle. A set is provided to cover the range required for practice
2. Obstacle support rod with guidance
3. Jet deflector obstacle. 3 obstacles are provided: flat plate diameter 74 mm, conical plate 120 ° diameter 60mm and hemispherical plate 180° diameter 60mm
4. Interchangeable nozzle: diameter 5mm and 8mm
5. Quick coupling for removing the nozzles
6. Transparent plastic test tube diameter 200mm length 340mm
7. Water outlet connection
8. Water supply connection
9. Support feet with non-slip pads

Services required

- Water supply: 40 L / min - 2 bars or supply by bench UTL 050 (option not included)
- Water drain: at ground level
- Dimensions: (LxWxH mm): 400 x 250 x 700
- weight (Kg): 20

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Certificate of conformity CE

Recommended equipment

- Hydraulic bench
- Ref : UTL 050