

## IMPACT OF A JET STUDY UNIT



---

---

### Experimental capabilities

---

---

- Comparison of the force exerted by a jet on a hemispherical surface, planar or conical
- Influence of the nozzle diameter
- Study of the relation between the water flow (impact velocity) and the force exerted on the obstacle

# PBJ100

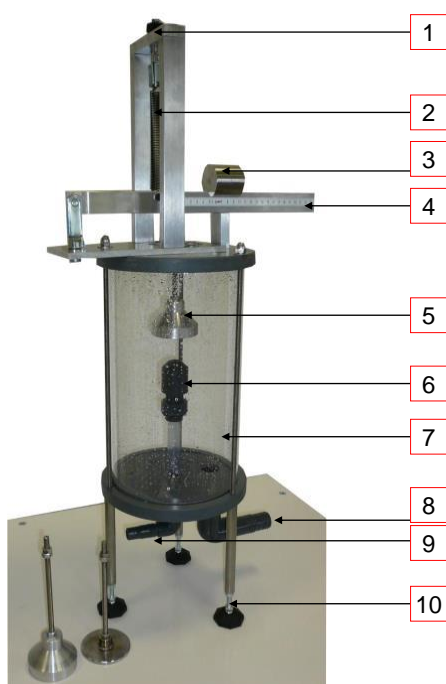


## Operating principle

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 balance equipped with a mass with an adjustable position.  
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. Adjustment screw of the equilibrium point
2. Spring of suspension of the obstacle
3. Balancing mass of the balance (weight 610Grs with a central graduation for the position)
4. Balancer arm with graduation of the position of the mass (0-230mm)
5. Obstacle deflector of the jet. 3 obstacles are provided: flat obstacle diameter 74 mm, 120 ° cone diameter 60mm and 60mm diameter half sphere
6. interchangeable nozzle: 5mm and 8mm diameter
7. Test tube in clear plastic 200mm diameter 340mm length
8. Drain fitting of water
9. Water supply fitting
10. Support leg with anti-slip pads

## Services required

## Documentation

- Water supply: 40 L / min - 2 bars or supply by bench UTL 050 in option (not included)
- Water drain: at ground level
- Dimensions: (LxWxH mm): 400 x 250 x 800
- weight (Kg): 20

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

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

DIDATEC– Zone d'activité du parc – 42490 FRAISSES- FRANCE  
Tél. +33(0)4.77.10.10.10 – Fax+33(0)4.77.61.56.49 – [www.didatec-technologie.com](http://www.didatec-technologie.com)  
email : [service\\_commercial@didatec-technologie.com](mailto:service_commercial@didatec-technologie.com)

Reproduction interdite / copy prohibited– Copyright DIDATEC avr.-16- page 2

Dans le cadre de l'amélioration permanente de nos produits, ce descriptif technique est susceptible d'être modifié sans préavis  
As part of the continuous improvement of our products, this technical specification may be modified without previous notifying