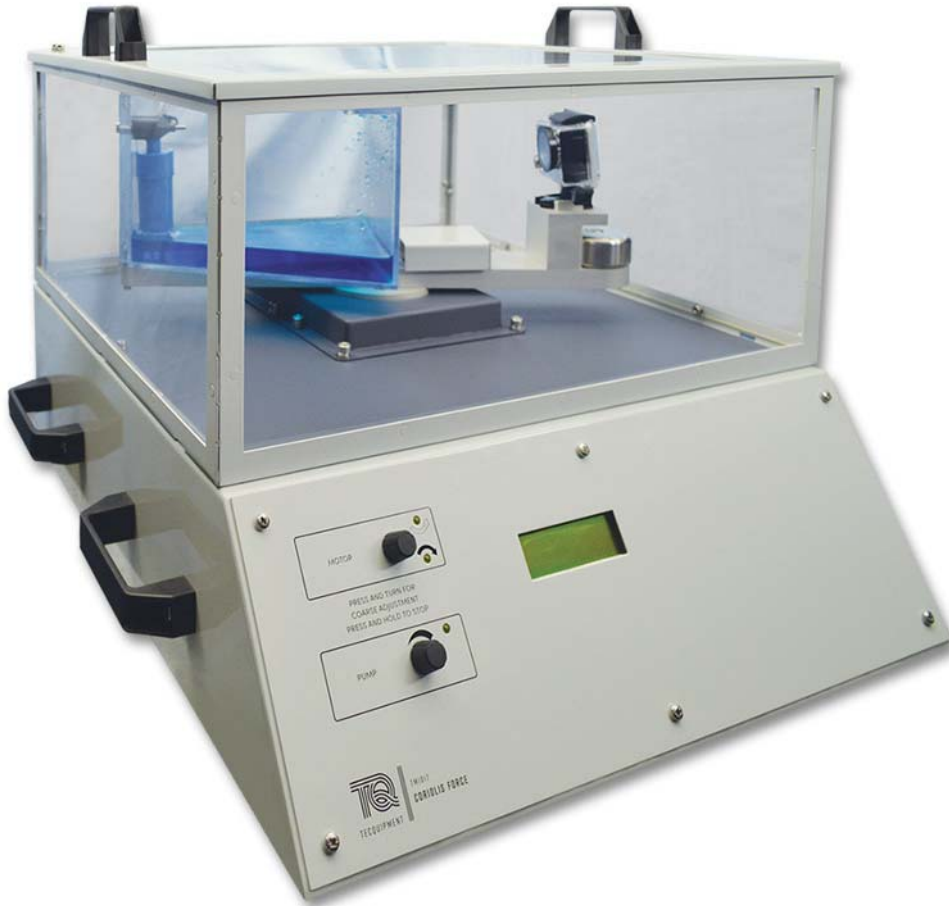




TM1017

CORIOLIS FORCE

Bench-top apparatus for demonstrations and experiments in Coriolis force.



KEY FEATURES

- Portable self-contained bench top unit, suitable for classroom demonstrations and use by small groups of students
- Clearly demonstrates the Coriolis force deflecting a jet of water within a rotating reference system
- Adjustable speed and direction of rotation
- Adjustable pump rate
- Local LCD display with direct measurement of rotational speed and pump rate
- Interlocked transparent guard for safety, while allowing students to see water jet deflection
- Unit is supplied with an action camera to view water deflection using a WiFi enabled smart device (not supplied)

LEARNING OUTCOMES

- Understanding of fictitious forces
- Visualisation of the Coriolis force effect
- Verification of the relationship between Coriolis force, the speed and direction of rotation and the velocity of objects moving within the rotating reference frame

CORIOLIS FORCE

DESCRIPTION

A bench-top base unit supporting a rotating arm on which a transparent water tank and counterbalance are mounted.

The water tank houses a submersible pump which produces a jet of water. The jet of water is observed to deflect when the arm rotates.

The deflection is due to the Coriolis force, a fictitious force which appears to act on objects moving within a frame of reference that is rotating.

Dials and a digital display on the base unit allow students to adjust the speed and direction of rotation, as well as the pump rate.

STANDARD FEATURES

- Supplied with comprehensive user guide
- Five-year warranty
- Manufactured in accordance with the latest European Union directives
- ISO9001 certified manufacturer

ESSENTIAL SERVICES

BENCH SPACE NEEDED:

Approximately 600 mm x 600 mm

ELECTRICAL SUPPLY:

Single phase, 90 – 250 VAC, 50 / 60 Hz, 1A

OPERATING CONDITIONS

OPERATING ENVIRONMENT:

Laboratory or classroom

STORAGE TEMPERATURE

-25°C to + 55°C (when packed for transport)

OPERATING TEMPERATURE RANGE:

+5°C TO +40°C

OPERATING HUMIDITY RANGE:

80% at temperatures < 31°C decreasing linearly to 50% at 40°C

SPECIFICATIONS

TecEquipment is committed to a programme of continuous improvement; hence we reserve the right to alter the design and product specification without prior notice.

NETT DIMENSIONS AND WEIGHTS:

600 mm (width), 570 mm (depth), 380 mm (height), 23Kg (weight, without water)

APPROXIMATED PACKED VOLUME AND WEIGHT:

Approximate packed volume 0.13 m³

Approximate packed weight 25.3 kg

