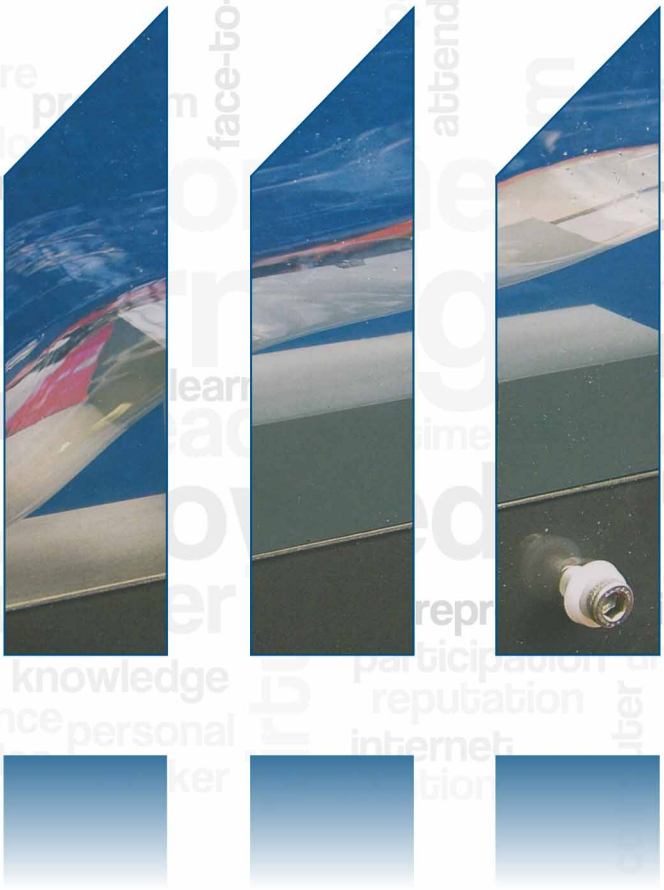

Fluid Mechanics

infoWERK
medien & technik

TE86 Water Hammer Apparatus

A compact unit that shows the water hammer effect

- Shows the propagation of shock waves at sonic velocity in water
- Shows how to calibrate an electronic pressure transducer
- Includes electric valve to stop flow instantly
- Contains over 60 m of pipe in one compact unit to save space
- Includes mechanical and electronic pressure measurement
- Includes connectors for extra (optional) equipment for transient measurements

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An ISO 9001 certified company

TecQuipment

TE86 Water Hammer Apparatus

Description

The apparatus is made up of a coil of copper pipe 60 m long, supplied with mains water and fitted with a solenoid valve at the discharge end.

An electronic pressure transducer near to the valve measures the pressure fluctuations in the pipe when the solenoid valve shuts.

A bypass valve discharges to waste at the inlet end of the pipe. A second adjustable valve is at the discharge from the pipe, downstream of the solenoid valve. This regulates the mean pressure in the pipe before the solenoid valve shuts.

A Bourdon pressure gauge fitted between the solenoid valve and the downstream control valve shows the pressure in the system. It also allows students to calibrate the pressure transducer.

Standard Features

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

Essential Ancillary

- Two channel Oscilloscope (H405a) – Dual-trace (two channel) oscilloscope with storage

Experiments and Studies

- Water hammer
- Propagation of shock waves in water
- Velocity of sound in a water filled pipe
- Transducer calibration

Essential Services

Electrical supply:
Single-phase, 110 VAC or 240 VAC, 50Hz to 60 Hz (specify on order)

Water supply:
Minimum 5 $L.min^{-1}$ at 3 bar

Operating Conditions

Operating environment:
Laboratory

Storage temperature range:
–25°C to +55°C (when packed for transport)

Operating temperature range:
+5°C to +40°C

Operating relative humidity range:
80% at temperatures < 31°C decreasing linearly to 50% at 40°C

Specification

Nett dimensions:
700 mm x 950 mm x 1000 mm

Packed dimensions:
0.84m^3 and 121 kg

infoWERK is a leading expert in the development of eLearning courseware, learning system solutions, teaching and AV equipment.

Furthermore infoWERK is the representative and system integrator of "TecQuipment".

TecQuipment is one of the global leaders in technical teaching equipment for engineering. If you are interested in one of TecQuipment's products feel free to contact us at:

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