

PIPER DART 900

TECHNICAL DATASHEET



This type of Pneumatic PIPER or with electrical drive motor is especially designed for drop-weight test on pipe and plate (including plastics, ceramic, Nylon, and building materials) impact tests complying with international standards.

A special version equipped with force transducer, precise data sampling and measurement system, it fully satisfies instrumented tests request (optional).

Carry out impact tests in accordance with the foreseen methods, on plastic pipes with a diameter up 900 mm

Both the firing pin holder and the V-shaped support (for positioning the sample tube) are operated by a motorized system.

The heights are adjusted by encoder.

After the impact of the firing pin on the specimen, the anti-rebound device automatically comes into operation.

The equipment is equipped with a separate controller with colour touch screen control panel and a pair of safety buttons to release the dart.

In standard configuration it is equipped with:

- dart holder with Slide for maximum striker Φ 90 mm
- encoder for the height of fall (from 6 to 200 cm);
- "V" support suitable for adjusting the tube sample to be tested (optional intermediate measures)
- Safety protection along the descent of the dart in transparent material

Technical features:

- The gravity drop tower for performing high energy impulse impact testing is ideal for product development and quality control within manufacturing, research and development labs and teaching institutes, and will broadly meet the requirements of tests. Smaller drop heights are available

- Specimens: Φ 120mm- to Φ 900mm
- Drop height: 50-2000mm, $\pm$ 2mm
- Energy loss: < 0.25%
- Striker: (0.25-16) Kg, tolerance $\pm$ 0.5%

Reference Standards

ISO	3127 (EN 744)
ISO	11173
CEI	61386

Generals:

Dimensions: 1400 x 700x 3400 mm

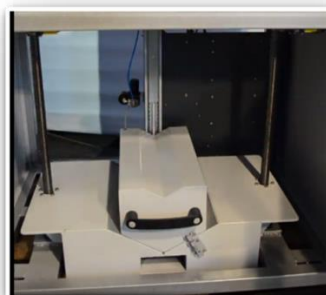
Weight: 300 kg

Power : 230V, 50Hz

Max pneumatic pressure 8 bar

Support

The test is used for examining sections of pipe and pipes for impact resistance properties such as complete pipe segments. Diameter samples from Φ 20 mm up to Φ 900 mm can be tested on the standard machine. The tube is supported by a "V" angled at 120 ° as it is affected by the impactor in a single fall. Mounting brackets can be made to any test standard or customer requirement.



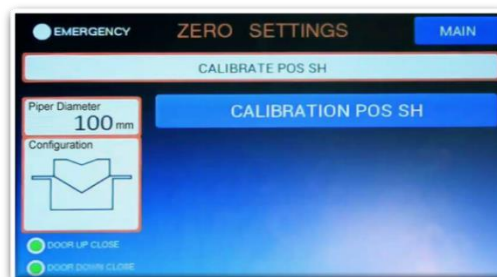
Adapters for various tube sizes.



The system is equipped with an **anti-rebound device** to prevent the striker, following the rebound after the impact with the object under test, hitting it a second time, altering the meaning of the test.

After carrying out the test, the striker is automatically brought back to the starting height which can be adjusted between 50 and 2000 mm.

The instrument is equipped with a door with safety device.



Direct reading measurement 7" colour display for all functions. The instrument is designed to guarantee the safety of the operator,, available the following systems:

Emergency button to stop current operations, or avoid dangers. The emergency system active till the operator rotates the button to deactivate it.

Restart of the instrument, after power supply cut off, with Reset.

Impact hammer/ striker



16021011 Striker 25 mm

Standard supply does not include Impact strikers nor Sample Holder, available range depending on pipe diameters to be tested:

Impact hammer D25

Impact hammer D90

Impact hammer D35

Check Series of extra weights to reach 1.5, 3.2 ,5, 10,16 kg. masses

Maximum impact capacity 16 kg of mass from 2 meters in height.

Code	Description
16021002	PIPER DART 900
16021009	Striker Φ 35 mm. 6.3 kg + (2) weights to 9.1 kg, 13.6 kg.(IEC 61386)
16021010	Striker Φ 25 mm weights (2) 0.25 kg to 0,8 Kg (ISO 3127)
16021011	Striker dia. mm 25, weights (2). 1kg + to 1,5 Kg
16021012	Striker Φ 90 mm weights (4) 4.0 kg to 8 Kg (ISO 3127)
16021013	Striker Φ 35 mm weights (2) 1kg to 5 Kg (IEC 61386)
16021014	Striker Φ 90 mm weights (3) 10kg to 16 kg (ISO3127)
16021015	Striker Φ 90 mm weights (5) 1kg to 3,2 kg (ISO 3127)
16021035	V - shaped support from 60 max 300 mm Piper 900
16021036	V - shaped support from 20 max 60 mm Piper 900
16021026	Speed / energy measurement sensor J

