



# Orion PTS

PRECISION TESTING SOLUTIONS

## OR-DDi20

### Falling Drop Dart Tester

V1.01

Introducing a brand new range of materials testing equipment from **Orion-PTS**.

The free **Falling Dart Impact Tester** provides an advanced method of testing over the basic model for determining the energy that causes plastic film or other flexible materials, usually no greater than 0.25mm, to fail under impact from a free falling dart. The energy required to tear or puncture the test specimen is expressed in terms of the darts weight (mass) which would result in the failure of 50% of specimens being tested. The instrument complies with methods A & B of the ASTM D1709 and ISO 7765 testing standards

Integrated with a dedicated microprocessor and 7" touch screen interface test results and sample batches are simple to calculate and report. Test setup is entered and stored for future use and test results are automatically displayed on the touch screen display which can be downloaded into the dedicated LABLogic+ software platform, supplied with the instrument, by Ethernet or USB connection to PC or downloaded straight to a USB flash drive.

The methods of holding the test specimen and releasing the dart are designed so that they may be accurately repeated for each test performed. Test specimens are securely clamped in the two piece pneumatic clamp system ensuring test repeatability without slippage of the sample. Standard dart drop heights of 660mm or 1500mm (optional extension kit required) fulfil the test requirement and can be easily set up. The instrument is a two handed operation to ensure optimum operator safety, to clamp the sample which then allows you to release the dart which is secured by an electro magnet. A dart rebound guard is also supplied to ensure the operators safety from rebounding darts.

The apparatus is supplied as standard with an aluminium dart with a 38.1mm (1 1/2") spherical radius tip and a set of binary weights for testing up to 2kg in drop mass. Additional weights can be supplied if required (optional)

The instrument is multi voltage and designed to be bench mounted at 660mm drop height but can easily be placed on a floor if the 1.5mtr drop height test is required and you have limited ceiling height.



#### Specifications

- Conforms to ASTM D1709 & ISO 7765 test standards
- Dedicated Microprocessor and 7" touch screen display
- LabLogic+ software included
- Bench mounted
- 660mm drop height as standard
- Pneumatic sample clamp system
- Electro magnet dart release
- Two handed operation for user safety
- Weight (kg) - 35kg
- Dimensions - 44cm x 54cm x 120cm
- Traceable calibration certificate
- Product user manual
- UKCA/CE Declaration
- Warranty - 1 year return to base.

#### Options

- Method B extension kit - includes 50.8mm (2.0") dart & weight set
- Addition test weights methods A & B