

PDT 80M - precision drop tester



The Model PDT 80M is Lansmont's entry level Precision Drop Tester. The PDT 80M consists of a drop leaf assembly housed in a cast aluminum structure that supports the precision guides and the pneumatic cylinder. This support structure is mounted on a 3 inch (7.6 cm) diameter chrome-plated steel column that is rigidly fixed to the ½ inch (1.3 cm) thick steel base plate with a heavyduty collar.

The weight of the drop tester is counterbalanced so changing drop heights is easy; simply remove the lock pin on the rear of the machine, move the assembly up or down as required, and reinsert the pin. The steel column is pre-drilled to give 1 inch (2.5 cm) drop height increments from 12 to 36 inches (30.5 to 91.5 cm), every 2 inches (5.08 cm) from 36 to 42 inches (45.7 to 91.5 cm) and every 6 inches (15.2 cm) from 35 to 71 inches (88.9 to 180 cm).

Specifications

- » Maximum Package Weight:
 - » Standard Platen: 80,0 kg
 - » Extended platen option: 68,0 kg
- » Maximum Package Size (front-to-back):
 - » Standard Platen: 61,0 cm (front to back)
 - » Extended platen option: 91,5 cm (front to back)

Dimensions

- » Height: 264 cm
- » Width: 91.5 cm
- » Length: 141cm
- » Weight: 227 kg
- » Power supply: 110 - 220 V AC, 50/60Hz

Options

- » Extended platen
- » Oversized baseplate
- » Edge and corner holding fixture
- » Installation kit



Foot switch

The drop mechanism of the PDT 80M Drop Tester is operated via a footswitch. When the footswitch is pressed, the drop leaf is activated and performs a drop test.

After the footswitch is released, the drop leaf will reset. The footswitch is protected inside a metal guard enclosure to avoid accidental activation.

Precision cam design

Lansmont's precision cam and bearings design is a key machine feature for producing a flat drop event. When the drop tester is armed and fired, the drop leaf first moves straight down faster than the package and then swings out of the way in time to clear the path for the package's free fall.

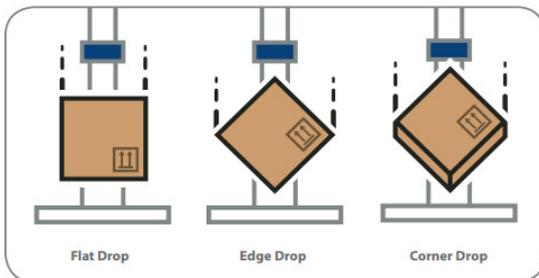


Counter-Balance Assembly

The drop height of the PDT 80M Drop Tester is adjusted manually. To alleviate the weight of the drop assembly when making height adjustments, the PDT 80M incorporates a unique counter-balance assembly. This feature makes the height adjustment process simple and easy for any test engineer.

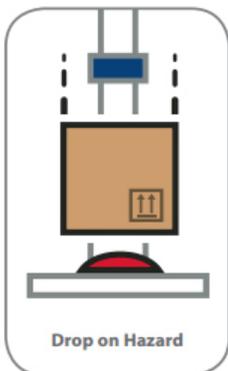
Applications

Controlled orientation



Test procedures and industry standards specify the requirement for controlled orientation drops, resulting in test sample impacts on predetermined faces, corners and edges. Lansmont Precision Drop Testers are built in accordance with ASTM D5276 requirements.

Hazard Drops

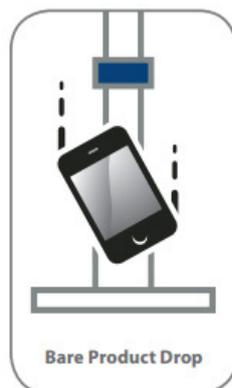


In reality, not all items are dropped on flat, laboratory-style floors. In fact, some small parcel distribution tests require drops to occur on a predetermined hazard.

Product Drops

Lansmont customers use drop testers to perform bare product drop testing to simulate in-use events that may occur once out

of their protective packaging and in the hands of the consumer.



Extended Height

Dangerous goods packages undergo severe drop tests during certification testing.

Other high performance products and packages also need to survive high energy impacts.

Lansmont offers extended height drop testers to satisfy these testing applications.

Custom drop height options are available to extend your machine's drop height range.