

PDT-56ED Precision Drop Tester

The Precision Drop Tester Model PDT-56ED is Lansmont's most popular drop test system. The PDT-56ED utilizes a unique combination of precision guiding and high-speed pneumatics for superior accuracy. For positioning, the PDT-56ED incorporates an electric hoist for rugged, dependable service. The hoist allows operators to pick up heavy, cumbersome packages and position them accurately at the chosen drop height. The PDT-56ED also includes Lansmont's exclusive Micro-Test™ hand-held controller. The MicroTest™ controller allows the user to program drop heights, assign a "Height Return" so that the drop carriage automatically returns to the same height after picking up a package, drop and reset functions, and selection between the hand-held controller or the included foot-switch. LCD display reads drop heights in either inches or centimeters and is selectable by the user. For accuracy, dependability, and user convenience, the PDT-56ED with Micro-Test™ controls is a hard combination to beat!

PDT-56ED Features:

- Pneumatic Cylinder: Fires the drop leaf straight down at acceleration levels greater than 1 g, imparting no rotational forces on the package and assuring accurate, repeatable flat drops.
- Pneumatic brake system insures rigidity once the system is armed and ready to fire
- Electric Hoist and Micro-Test™ controls for simple machine control.
- Safety features include separate "Arm" and "Drop" buttons which prevent inadvertent drops.
- Meets and exceeds industry standards: ASTM, ISTA, etc.
- Worldwide Customer Service department



PDT-56ED Options:

- **Extended Platen:** This option increases the front-to-back capacity of the drop tester from 24 in. (61 cm) to 36 in. (91.4 cm).
- **Oversized Baseplate:** For testing larger specimens. Increases baseplate size from 53.5 in. x 36 in. (135.9 cm x 91.4 cm) to 53.5 in. x 60 in. (135.9 cm x 152.4 cm).
- **Additional drop height:** Allows the PDT-56ED to drop from higher than standard drop heights. Up to a maximum of 168 in. (427 cm).
- **Slotted Baseplate:** Allows drops from as low as 1 in. (2.54 cm). Requires special concrete foundation. Includes concrete forms.
- **Edge and Corner Holding Fixture:** This device consists of a flexible support secured to the top of the pneumatic cylinder to hold packages in position for edge drops and corner drops.
- **Installation Kit:** Includes everything necessary for installing the drop tester, including concrete anchors and drill bit, low-pressure hose fittings, and plant-air regulator.

17 Mandeville Court, Monterey, CA 93940

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PDT-56ED Precision Drop Tester

TECHNICAL SPECIFICATIONS

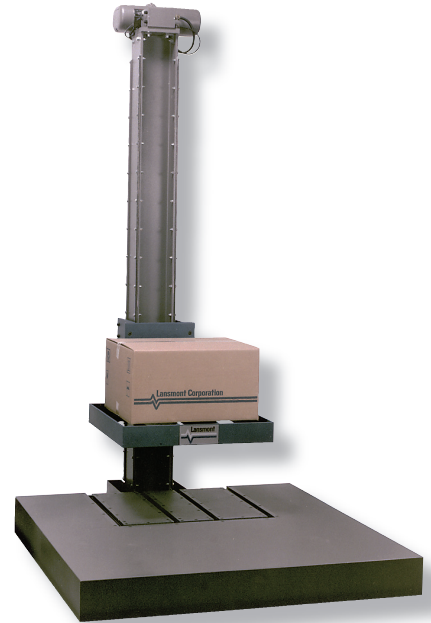
PHYSICAL		
	STANDARD PLATEN	EXTENDED PLATEN
Max. Package Weight	175 lbs. (79 kg)	150 lbs. (68 kg)
Max. Package Size:		
Length	No Restrictions	No Restrictions
Width	24 in. (61 cm)	36 in. (91.4 cm)
Height	No Restrictions	No Restrictions
Flatness of Drop	Meets ASTM D-775	Meets ASTM D-775
Drop Height Range:		
Standard Baseplate	11 – 72 in. (27.9 – 182.9 cm)	18 – 72 in. (45.7 – 182.9 cm)
Slotted Baseplate	1 – 72 in. (2.54 – 182.9 cm)	1 – 72 in. (2.54 – 182.9 cm)
Additional Drop Height Option:		
Standard Baseplate	11 – 144 in. (27.9 – 365.8 cm)	18 – 144 in. (45.7 – 365.8 cm)
Slotted Baseplate	1 – 144 in. (2.54 – 365.8 cm)	1 – 144 in. (2.54 – 365.8 cm)
Drop Height Increments	Variable 0.10 in., 0.25 cm	Variable 0.10 in., 0.25 cm
UTILITIES		
Voltage	100 – 240 VAC	
Frequency	50 Hz – 60 Hz	
Phase	Single Phase	
Current	10A (115 VAC), 5A (230 VAC)	
Plant Air	60 psi (4.1 ATM)	
DIMENSIONS		
Overall Height:		
Standard	106 in. (269.2 cm)	
With Maximum Drop Height Option	178 in. (452.1 cm)	
Baseplate Dimensions:		
Standard	53.5 in. x 36 in. (135.9 cm x 91.4 cm)	
Oversized	53.5 in. x 60 in. (135.9 cm x 152.4 cm)	
Shipping Weight	550 Lbs. (250 kg)	



PDT-227 Precision Drop Tester

Lansmont's Precision Drop Tester Model PDT-227 was designed to pick up and drop heavy packages and test specimens weighing up to 500 Lbs. (227 kg). The PDT-227 utilizes a high-strength welded steel drop platform which rides on precision bearings. When a drop test is initiated, the drop carriage is accelerated straight down from underneath the test specimen, imparting no rotational forces and insuring a flat drop. The drop carriage of the PDT-227 falls into slots on the machine's foundation and its motion is arrested by a hydraulic shock absorber and high-damping elastomer snubbing devices, preventing the carriage from rebounding back into the test specimen. The PDT-227 utilizes a heavy-duty electric hoist for picking up and positioning test loads. The electric hoist incorporates an internal brake system which is set to prevent accidental drops in the event of power loss. Positioning is infinitely variable within the drop range of the machine.

The PDT-227 also utilizes Lansmont's Micro-Test™ hand-held control system for conveniently operating the test system. The MicroTest™ controller allows the user to program drop heights, assign a "Height Return" so that the drop carriage automatically returns to the same height after picking up a package, and drop and reset functions. LCD display reads drop heights in either inches or centimeters and is selectable by the user.



PDT-227 Features:

- Concrete floor mounting included. Lansmont provides concrete forms and all hardware. This allows the drop carriage of the PDT-227 to fall into laboratory's concrete floor. No package dimensional restrictions in the side-to-side orientation.
- Electric Hoist and Micro-Test™ controls for simple machine control.
- Safety features include separate "Arm" and "Drop" buttons and an integral hoist braking system which prevent inadvertent drops.
- Meets and exceeds industry standards: ASTM, ISTA, ISO, etc.
- Worldwide Customer Service department.

PDT- 227 Options:

- **Optional steel base.** Provides a machined steel base that the carriage drops into. This option allows easy relocation of test system, if necessary.
- **Edge and Corner Holding Fixture**
- **Photocell Safety System**

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PDT-227 Precision Drop Tester

TECHNICAL SPECIFICATIONS

HEAVYWEIGHT DROP TESTER	PDT-227	PDT-227 STEEL BASE
PHYSICAL		
Maximum Package Weight	500 Lbs. (227 kg)	500 Lbs. (227 kg)
Maximum Package Size:		
Side-to-Side	No Restriction	60 in. (152 cm) (Limited by impact surface size)
Height	No Restriction	No Restriction
Front-to-Back	44 in. (112 cm)	42 in. (107 cm) (Limited by impact surface size)
Drop Height Range	1 in. – 72 in. (2.54 cm – 183 cm)	1 in. – 72 in. (2.54 cm – 183 cm)
Drop Height Increments	Infinitely Variable	Infinitely Variable
Drop Platform Size	27 in. (68 cm) Front-to-Back	27 in. (68 cm) Front-to-Back
UTILITIES		
Voltage	100 – 240 VAC	100 – 240 VAC
Frequency	50 Hz – 60 Hz	50 Hz – 60 Hz
Phase	Single	Single
Current	15A / 7.5A	15A / 7.5A
Plant Air	90 psi (6.1 atm)	90 psi (6.1 atm)
DIMENSIONS		
Overall Machine Height	104 in. (264.2 cm)	112 in. (284 cm)
Base Size:		
Front-to-Back	Unlimited, if cast flush with floor	62 in. (157 cm)
Width	Unlimited, if cast flush with floor	64 in. (163 cm)
Shipping Weight	1,000 Lbs. (455 kg)	3,000 Lbs. (1,360 kg)

