



Durometer Operating Stand 7000D

ASTM Type 2 Indenter to Specimen



- Hydraulically Controlled Rate of Descent
- Cam Actuated Raise and Lower
- Adjustable Specimen Support Table
- Eliminates User Error
- Increases Accuracy
- NIST Certification Available
- Compatible with ASTM Type C | D | DO

PTC® has developed the first mechanical operating stand that delivers a load sufficient to overcome the spring force of the durometer smoothly and without shock in approximately 1 second from contact. Most other mechanical stands apply an increasing load over time which gives inconsistent and inaccurate readings. Since elastomeric materials creep over time, it is essential that the load be applied promptly.

This precisely engineered durometer stand has a hydraulic damper controlling the rate of descent smoothly, without jump or stutter. The unit is activated with a simple smooth lever control. This stand is designed for serious testing, eliminating operator variability and increased accuracy and repeatability. Whether in the lab or in a production environment you will get accurate and repeatable readings you can trust.

This heavy duty stand features a solid base for stability and a solid 1" diameter Stainless Steel Precision Ground Support Shaft for accurate alignment. It will accommodate both standard and pencil length durometers. It is made with high precision components throughout. Including ball bearings, sintered bronze bushings and precision machined components.

The stand will accept sample materials up to 3" (76mm) thick depending on the height of the durometer used.

Conical indenters (ASTM Type C and D) are easily damaged by making contact directly to the specimen table without a test specimen. Always use the setting block when checking parallelism.

The 7000 durometer operating stands were engineered to fit all PTC® durometer styles.

The Classic Style and the Ergo Style mount right on the stand. For the e2000™ and Pencil Style Durometers, a small mounting knob is included.

SPECIFICATIONS	
Weight	45lb (20.4kg)
Height	27 in (68.58 cm)
Base Dimensions	9.75 in x 8 in (234mm x 203mm)
Specimen Table	4 in x 4 in (101mm x 101mm)
Shipping Weight	60lb (27.21kg)



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Set-up and Instructions



Accessories Included

- Hex Key for removing oil chamber plugs
- Mounting Knob for 200 and 500 series PTC durometers
- Swivel Head Adapter
- Setting Block for ASTM Type C & D
- Bubble Level

PTC Metrology™ is the calibration lab for PTC® Instruments and is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.

The Operating Stand should be placed on a solid level work surface and checked with the bubble level. Adjust the base using the 3 leveling knobs.

Remove both plugs from the top of the oil chamber with the a hex key. Fill the oil chamber with hydraulic oil (80 ml.) using the syringe. Replace the plugs and snug with hex key. [\(See Video\)](#)



Swivel Head Adapter



Setting Block With Center Hole

Lower the specimen table down to the lowest position.

Mount the swivel head adapter to the 8-32" screw by turning 3 or 4 turns and tighten the thumb screw. A mounting Knob is provided for Durometers without a threaded mounting hole. Rotate the handle to the forward position.

Place the setting block with center hole on the specimen table. Adjust the Durometer within 1/4 "of the setting block.

Place the setting block on the specimen table.

Release the operating handle allowing the durometer to settle on the setting block with the indenter placed in the center hole. Never allow the tip to make contact with specimen table. This protects the indenter tip from damage.

Grasp the lower portion of the durometer body with the thumb and index finger and adjust the pressor foot so that it is flush with the setting block.

Tighten the swivel head thumb screw while holding the durometer body in position.

Return the handle to the forward position and remove the setting block. Adjust the specimen table to accommodate the material thickness.

Place the test specimen on the table.

Begin testing by releasing the handle. The test specimen shall be at least 6.0 mm (0.24 in.) in thickness unless it is known that results equivalent to the 6.0-mm (0.24-in.) values are obtained with a thinner specimen.

Note: The durometer pressor foot parallelism to the specimen table should be verified every time the durometer is mounted.