

Troxler Model 3430 and 3440 Moisture Density Gauges New! Updated!

Simply a Better Gauge!



- New look
 - Rugged, larger display screen and easy to use
- Updated electronics
 - Upgradeable and consistently reliable
- Many user-friendly features
 - Choose the options you need

www.troxlerlabs.com

The Troxler nuclear moisture density gauges are used by many contractors, engineers and highway departments for compaction control of soil, aggregate, concrete and full depth asphalt. The gauges meet or exceed the ASTM standards D6938, D2950 and C1040. The operator selects the density mode, backscatter or direct transmission, based on the material type and the thickness of the layer being measured. The Model 3430 is the simplest and most economical gauge offered by Troxler. The Model 3440 adds a larger keypad and more available features that are needed for some construction projects. Both models are customizable to meet your testing needs.

The Model 3430 is a simple gauge for users who don't need many "extras". The enhanced platform allows for many updates and advantages such as:

- Updated electronics
- NiMH batteries with fast recharge
- Larger backlit display screen 8mm characters
- Optional user-friendly features that can be added:
- External beeper
- Alkaline battery backup feature
- Remote start keypad on the handle
- Data storage
- USB port for data transfer
- Spanish and French language options

Troxler also offers the enhanced platform for the Model 3440. Customers can now add the features desired in order to customize the gauge to their testing needs. This model also offers updated electronics, batteries and display screen.

Standard features include:

- Automatic Depth function
- USB Port
- Data Storage
- Alkaline Battery Backup

Optional Features include:

- External beeper
- Remote Keypad
- Backlit keypad
- Spanish and French language options
- GPS locations for measurements

Both models offer:

- Density measurement capability in backscatter or direct transmission mode and moisture measurement in backscatter mode to allow quick, non-destructive testing of soil, asphalt and concrete materials
- Direct Readout of test results (wet density, dry density, moisture, % moisture, % voids and % compaction)
- Multiple count time options (15 sec., 1 min., 4 min.)
- · Moisture, Density and Trench Offsets
- User friendly software menus and keypads
- 18 month warranty

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In the direct transmission position the source rod extends through the base of the gauge into a predrilled hole up to 12 in. (30 cm) deep in the material being tested. The gamma rays are transmitted from the density source, through the test material and are counted by detectors located within the gauge.

Direct Transmission

Measurement

Moisture Measurement



Moisture content is measured in a nondestructive test mode. Moisture is determined through the detection of thermalized neutrons ("fast" neutrons which have been slowed by the hydrogen present in the material, normally in the form of water).

Backscatter Measurement



The backscatter mode is a rapid and nondestructive means of testing materials that are approximately 4 in. (10 cm) in depth. The gamma source remains inside the gauge and the gamma rays that are scattered back toward the detectors are counted, determining the density count for the material. This mode of testing is usually used on asphalt and concrete.

	3430	3440	3440 w/GPS
Keypad	10 keys (simple)	30 keys	30 keys
Auto-Depth	N/A	✓	✓
Display	Enlarged / Backlit	Enlarged / Backlit	Enlarged / Backlit
Alkaline Battery Backup	Optional	✓	✓
Data Storage	Optional (100 readings)	✓ (1000 readings)	✓ (1000 readings)
USB port	Optional	✓	✓
Remote Start Keypad (near handle)	Optional	Optional	✓
GPS	N/A	N/A	√
External Beeper	Optional	Optional	Optional
Language Options (Spanish, French- software, keypad & manual)	Optional	Optional	Optional
Backlit Keypad	N/A	Optional	√

All gauges offer the option of 12"/1" or 8"/2" Measurement Positions

Troxler Service Center Locations

Visit our website for address and contact information.

- Research Triangle Park, NC
- · Orlando, FL
- · Downer's Grove, IL
- Arlington, TX
- · Houston, TX
- · Rancho Cordova, CA
- Munich, Germany
- · Zhangjigang, China
- Approx.50 distributors located around the world

Meets ASTM standards D6938, D2950 & C1040.

MEASUREMENT SPECIFICATIONS				
Direct Transmission (150 mm)				
	<u>.25 min</u>	1 min	4 min	
Precision kg/m3 (pcf)	±6.8 (±0.42)	±3.4 (±0.21)	±1.7 (±0.11)	
Composition error (kg/m3)	±20.0	±20.0	±20.0	
Surface error (kg/m3) (100% Void)	-17.0	-17.0	-17.0	
Backscatter (98%, 100 mm)				
Precision (kg/m3)	±16.0	±8.00	±4.00	
Composition error (kg/m3)	±40.0	±40.0	±40.0	
Surface error (kg/m3) (100% Void)	-75.0	-75.0	-75.0	
Surface error (kg/m3) (100% Void)	-75.0	-75.0	-75.0	
Moisture at 240 kg/m3				
Precision (kg/m3)	±10.3	±5.1	±2.6	
Surface error (kg/m3) (1.25 mm, 100% void, kg/m3)	-18.0	-18.0	-18.0	

RADIOLOGICAL SPECIFICATIONS		
Gamma Source	0.30 GBq (8mCi) ± 10% Cs-137	
Neutron Source	1.48 GBq (40mCi) ± 10% Am-241:Be	
Source Housing	Stainless steel, encapsulated	
Surface Dose Rate	(5cm) 19 mrem/hr maximum, neutron and gamma	
Shipping Case	DOT 7A, Type A, Yellow II label, TI=0.3	

ELECTRICAL SPECIFICATIONS		
Main Power Source	5C NiMH (Rechargeable Pack)	
Backup Power Source	5 AA Alkaline Batteries - 3440 Optional - 3430	
Stored Power	4 Ampere hours	
Battery Recharge Time	3 Hours maximum, auto cutoff	
Charge Source	110/220 VAC, 50 or 60 Hz or 12-14 VDC	
Current Consumption Average	35 mA	
Time Before Auto Shutdown	5 Hours of inactivity	
Readout	4 x 20 Alphanumeric	
Keypad	30 key sealed membrane - 3440 10 key sealed membrane - 3430	

MECHANICAL SPECIFICATIONS		
Gauge Size (including handles)	12" - 23.5"x9"x14.5" (59cm x 22.9cm x 36cm) 8" - 19.5" height (49.5cm)	
Shipping Case Size	29.4" x 13.9" x 16.5" (75cm x 35cm x 42cm)	
Shipping Weight	83lbs (37.6kg)	
Weight	31lbs (14.1kg)	
Operating Temperature	Ambient: 32 to 158 ^O F (0 to 70 ^O C) Surface: 350 ^O F (175 ^O C) for 15 minutes	
Storage Temperature	-70 to 185 ^O F (-55 to 85 ^O C)	