

Solid Material Density Tester

Product Range



Solid Material Density TesterOverview

Torontech's Solid Materials Density Tester product range offers cutting-edge solutions for precise density measurements across a variety of materials, including rubber, plastics, metals, and elastic solids.

Designed to cater to diverse industry needs, these instruments accommodate various sample sizes and weights while maintaining exceptional accuracy and compliance with international standards such as **ASTM and ISO.**

This product line covers an extensive range of applications, from small, lightweight samples to large and elastic materials, making it suitable for laboratories and industries involved in quality control, material analysis, and research.

Utilizing advanced hydrostatic principles, these testers deliver reliable results for density, volume, and mixture ratio evaluations.

Our product range include:

- Solid Materials Density Tester TTD-1200E,
- Solid Materials Density Tester TTD-153E,
- Solid Materials Density Tester TTD-214E,
- Solid Materials Density Tester TTD-300DE,
- Solid Materials Density Tester TTD-300E/600E,
- Solid Materials Density Tester TTD-300RE,
- Solid Materials Density Tester TTD-LE,
- Solid Materials Density Tester TTD-SLE.

Whether testing viscous materials or high-capacity samples, the Solid Materials Density Testers provide a versatile and dependable solution for industries demanding precision and consistency in material characterization.

Explore our catalog to find the perfect solution for testing needs and elevate quality assurance processes to the next level.



ASTM AND ISO STANDARDS

for Precision Density Testing

The Solid Materials Density Testers by Torontech are engineered to conform to a variety of ASTM and ISO standards, ensuring precise and dependable density measurements. By adhering to these globally recognized benchmarks, these instruments provide consistent and accurate results, meeting the rigorous demands of modern laboratories and industries.

ASTM Standards

The American Society for Testing and Materials (ASTM) develops internationally recognized standards for material testing and quality assurance. The following ASTM standards are referenced in the Solid Materials Density Tester product range:

ASTM D297: Specifies procedures for testing and evaluating physical properties of rubber compounds, including density determination.

ASTM D792: Describes methods for determining the density and specific gravity of plastics using buoyancy techniques.

ISO Standards

The International Organization for Standardization (ISO) establishes global standards to ensure consistency, safety, and efficiency. The following ISO standards are referenced in the product range:

ISO 2781: Outlines procedures for determining the density of rubber and related elastomers.

ISO 1183: Specifies methods for measuring the density and relative density of plastics, including immersion and pycnometer techniques.



PRODUCT RANGE















300DE







TTD-300RE







TTD-SLE

COMPARISON OVERVIEW

















SPECIFICATIONS	MODEL											
	TTD-1200E	TTD-153E	TTD-214E	TTD-300DE	TTD-300E/600E	TTD-300RE	TTD-LE		TTD-SLE			
Maximum Sample Weight	1200 g	150 g	210 g	300 g	300 g or 600 g (Dual Weight Capacity Option)	300 g	1500 g, 2000 g, 3000 g	6000 g	2000 g, 3000 g,	6000 g		
							(Multiple Weight Capacity Option)		(Multiple Weight Capacity Option)			
Weighing Precision	0.01g	0.001g	0.0001g	0.01g	0.01g	0.01g	0.01g	0.1g	0.01g	0.1g		
Density Precision	0.001g/cm3	0.0001g/cm3	0.0001g/cm3	0.001g/cm3	0.001g/cm3	0.001g/cm3		0.001g/cm3				
Volume Precision	0.001g/cm3	0.0001g/cm3	0.0001g/cm3	0.001g/cm3	0.001g/cm3	0.001g/cm3	0.001g/cm3		0.001g/cm3			
Mixing Ratio 1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%		0.01%			
Mixing Ratio 2	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%		0.01%			

FEATURES/ADVANTAGES

FEATURES/ADVANTAGES	MODEL									
FEATURES/ ADVANTAGES		TTD-153E	TTD-214E	TTD-300DE	TTD-300E/600E	TTD-300RE	TTD-LE	TTD-SLE		
Density Measuring Mode (DS): Enables precise measurement of both density and volume, providing comprehensive material analysis.										
Hydrogen Content Measurement Mode (A/B): Measure Density Value and Hydrogen Content.	×	X	X		×		X	×		
Density Measuring Mode (DS - Green Color): Measures density and volume of viscous samples (A)	×	×	×	×	×			×		
Mix Ratio Density Measuring Mode (Mix1): Determines the proportion of the primary material within a sample.										
Mix Ratio Density Measuring Mode (Mix2): Ascertains the proportion of the secondary material for enhanced testing flexibility.										



OPTIONAL ACCESSORIES









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