



ABLATION NEEDLE STIFFNESS & TOUGHNESS TESTER

Ablation Needle Stiffness & Toughness Tester – ToronMed™ ANSTT06 is engineered to evaluate the stiffness and toughness of ablation needles with high accuracy and repeatability. Featuring dual testing modes and intelligent data analysis, this tester ensures ablation needles meet strict performance requirements for safety, durability, and clinical reliability.

Standard Configuration

- Main instrument unit
- 7-inch touchscreen interface
- Micro printer
- Test fixture for ablation needles

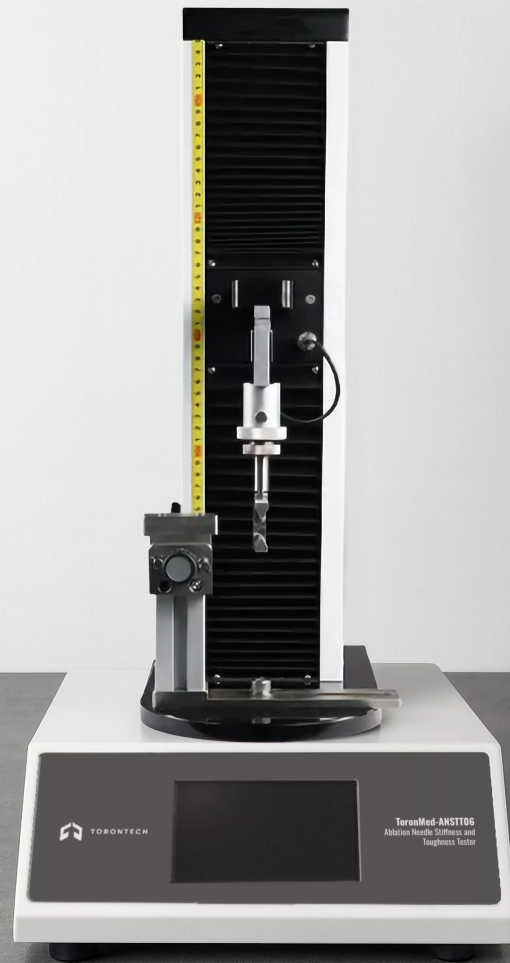
Why Choose Ablation Needle Stiffness & Toughness Tester – ToronMed™ ANSTT06?

The Ablation Needle Stiffness & Toughness Tester – ToronMed™ ANSTT06 provides precise, safe, and automated testing for evaluating ablation needle durability and reliability. With its dual-mode testing, intelligent data handling, advanced drive system, and extensive safety features, it is an indispensable instrument for medical device manufacturers, inspection authorities, and R&D laboratories. By ensuring needles meet strict performance requirements, the Ablation Needle Stiffness & Toughness Tester supports both product quality and patient safety.

APPLICATIONS

- **Medical Device Quality Assurance:** Primary function is to evaluate the stiffness and toughness of ablation needles, ensuring they meet strict performance requirements for safety, durability, and clinical reliability.

- **Compliance and Validation Testing:** Essential instrument for medical device manufacturers and inspection authorities to conduct accurate, repeatable compliance testing and validation under various loading conditions.
- **Research and Development (R&D):** Used in R&D laboratories for comparative studies, material science research, and optimizing the structural integrity of new or modified needle designs.
- **Performance Evaluation:** Determines needle resistance and deflection values by applying a controlled load to a secured needle, crucial for understanding clinical performance.



FEATURES

- Dual Test Modes
Supports both stiffness and toughness testing for comprehensive evaluation.
- High-Precision Measurement
Imported load cell from the USA delivers accuracy and stability across the full test range.
- Advanced Drive System
Equipped with a high-end motor and ball screw drive, offering stepless speed adjustment.
- Flexible Needle Compatibility
For needle diameters ≥ 1.4 mm: standard disturbance value of 30 mm
For needle diameters < 1.4 mm: deflection range adjustable from 0–50 mm
- Professional Tooling
Suitable for a wide range of ablation needles with dedicated fixtures.
- 7-Inch Color Touchscreen
Displays real-time curves and test results with intelligent data processing.
- Large Data Capacity
Stores more than 100,000 test records, with integrated micro printer for immediate reporting.
- Statistical Analysis
Provides maximum, minimum, and average values across multiple test runs.
- Safety Protections
Includes overload protection, limit switches, automatic return, and power-off memory for safe, stable operation.
- Data Security (Optional)
Four-level password protection and GMP-compliant software with user management, authority control, and audit tracking.

THEORY & METHOD

Test Principle

The Ablation Needle Stiffness & Toughness Tester secures a needle in a specialized fixture and applies a controlled load. The system measures deflection and resistance values to determine needle stiffness and toughness under various loading conditions. Automatic data capture and analysis ensure accurate, repeatable results for research, production, and compliance testing.

TECHNICAL SPECIFICATIONS

Specification	Value
Test Items	Stiffness, Toughness
Test Range	0-50 N
Accuracy	0.5% FS
Resolution	0.001 N
Testing Speed	0.05-600 mm/min
Dimensions	460 × 400 × 770 mm
Net Weight	33.5 kg
Voltage	AC 220V 50Hz (110V is also available)



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

