TORONTECH

SURGICAL SUTURE DIAMETER TESTER (SEMI-AUTO)

Surgical Suture Diameter Tester (Semi-Auto) – Model ToronMed™ SSDT01 | USP 861

Surgical Suture Diameter Tester (Semi-Auto) – Model ToronMed™ SSDT01 is designed to determine the diameter of absorbable and non-absorbable surgical sutures used for suturing and ligating human tissues. Built in accordance with USP 861 and other applicable international standards, this instrument ensures high-precision measurement and compliance with global medical device requirements.

Engineered for manufacturers, research laboratories, and quality control facilities, the Surgical Suture Diameter Tester – Model ToronMed™ SSDT01 delivers accurate, repeatable, and automated testing to validate suture quality and consistency.

Torontech is a trusted global provider of advanced medical device testing solutions. With the Surgical Suture Diameter Tester (Semi-Auto) – Model ToronMed™ SSDT01, manufacturers and laboratories gain a precise, automated, and standards-compliant solution to ensure sutures meet the highest levels of safety, reliability, and quality control.

APPLICATIONS

The Surgical Suture Diameter Tester (Semi-Auto) – Model ToronMed™ SSDT01 is ideal for:

- Suture manufacturers performing R&D and production quality control.
- Independent testing laboratories providing third-party verification.
- Regulatory compliance testing according to USP and international standards.
- Hospitals and research institutions validating new suture materials.

TORONTECH
ToronMed-SSDT01
Surgical Suture Diameter Tester

Standards

The Surgical Suture Diameter Tester (Semi-Auto) – Model ToronMed™ SSDT01 is designed in compliance with:

- USP 861 (United States Pharmacopeia) – Specifies methods for determining the diameter of absorbable and non-absorbable sutures.

FEATURES

- Compliance
  - Fully conforms to USP 861 and international suture testing standards.
  - Supports testing at multiple points (¼, ½, and ¾ positions of the suture).
  - For multifilament sutures larger than metric size 2, samples can be rotated 90° and re-measured without removal.
- Stability
  - Uses a grating displacement sensor for ultra-high accuracy (up to 1/10,000th), ensuring stable measurements.
- Convenience
  - Manual loading with automatic electric tensioning.
  - No need for weights—innovative high-precision force sensors automatically set tension.
  - Quick test and stop shortcut buttons for efficient operation.
- Intelligent Operation
  - 7-inch HD touch screen for real-time data display.
  - Automatic recording of diameter data, averaging of results, and report generation.
  - Built-in micro printer for instant test result output.
  - RS232 interface for easy PC connectivity and data transfer.
  - Large data storage capacity (up to 100,000 test records).
- Safety & Data Security
  - Equipped with over-travel protection, overload protection, and power failure memory.
  - Optional four-level user security and GMP-compliant software with audit trails for regulatory environments.

TECHNICAL SPECIFICATIONS

Specification	Surgical Suture Diameter Tester (Semi-Auto) – Model ToronMed™ SSDT01
Test Item	Suture diameter
Nominal Specification	12-0 to 10 (All Classes I, II, III medical sutures)
Test Range	0–6 mm (Deviation ≤ ±1‰)
Resolution	0.001 mm
Presser Foot Diameter	12.7 ± 0.02 mm
Anvil Diameter	50 mm
Flatness (Presser to Anvil)	≤ ±0.005 mm
Parallelism	≤ 1‰
Tensioning Force Range	0–5000 g (Accuracy ±0.1 g)
Presser Foot Load	≤ 60 g, 210 g ±3 g (with weights)
Test Data	Multi-point measurement (¼, ½, ¾) and averages
Voltage	AC 220V 50Hz / 120V 60Hz
Dimensions	600 × 340 × 270 mm
Net Weight	40 kg
Standard Configuration	Instrument, micro printer, touch screen, test fixture.

TORONTECH.com

TORONTECH

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

USA | Canada | EU | UAE | GCC | KSA | India | Africa | Latin America | Asia