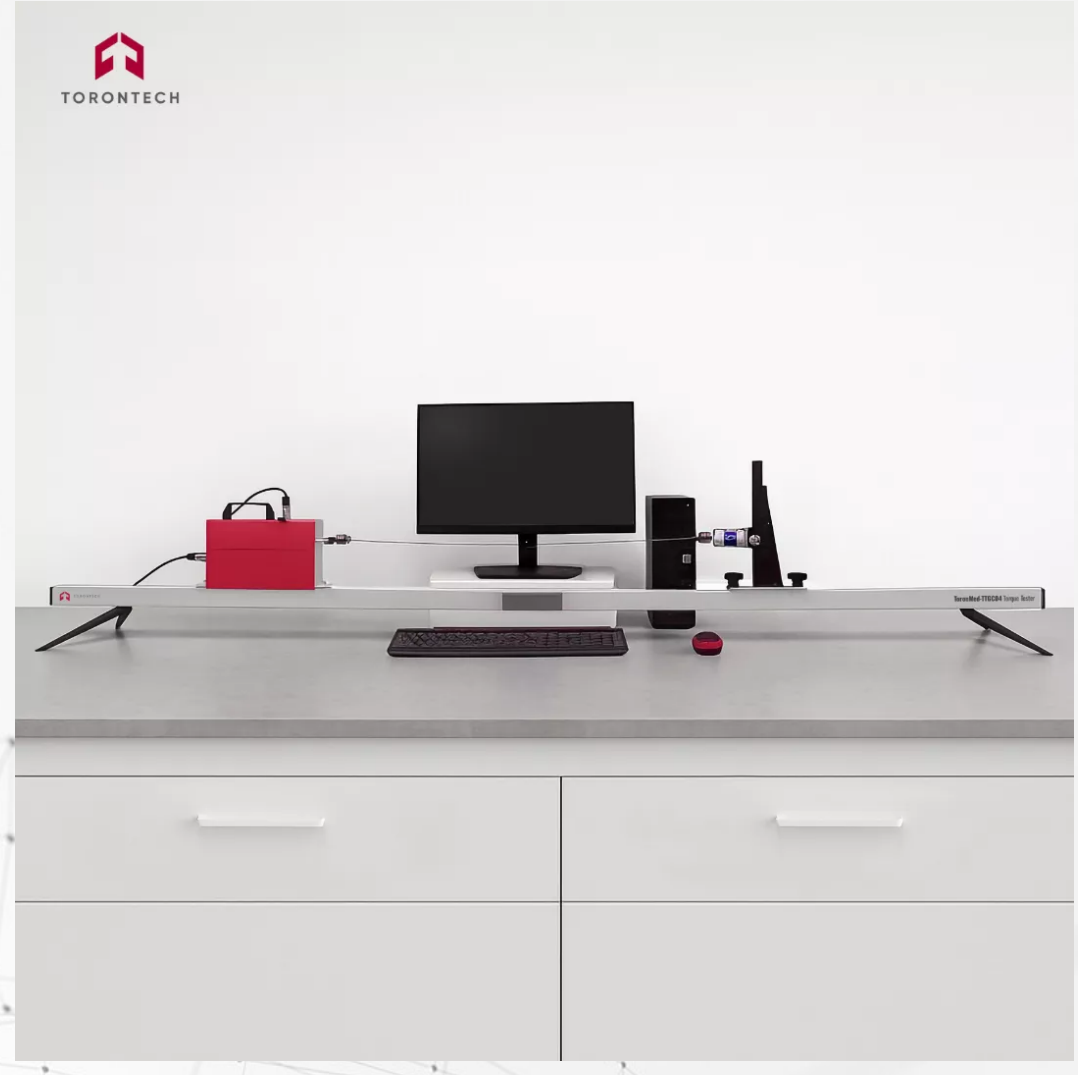
TORONTECH



TORQUE TESTER FOR GUIDEWIRES AND CATHETERS

Precision Instrument for Testing Torsional Strength, Constant Torque, and Angle Performance of Intravascular Devices

ToronMed™ TTGC04 Torque Tester is engineered for the determination of torque to failure, constant torque, and constant angle performance at the critical welding or joint points of intravascular guidewires, catheters, and related tubular devices. With its millinewton-level precision, the system is ideal for both R&D and quality assurance applications.

The tester is equipped with advanced torque sensors, flexible fixture systems, and professional PC software for real-time torque monitoring, curve analysis, and automatic data logging, making it compliant with modern testing standards for interventional medical devices.

APPLICATIONS

Special Capabilities

- Ideal for low-torque testing applications, including micro guidewires and fragile catheter joints
- Software-controlled test modes:
  - Constant torque
  - Constant angle
- Torque to failure (torsional strength)
- Tests both rotational stiffness and yield point of catheter and guidewire assemblies
- Suitable for single-use and multiple-use catheter technologies

Applications

Primary Use Cases	Extended Use Cases
Intravascular Guidelines	Other medical tubing
Interventional Catheters	Bars and tubular components
Welded Joint Evaluation	Flexible or coiled shafts

TORONTECH
TeronMed-TTGC04 Torque Tester

Standards Compliance

The ToronMed™ TTGC04 conforms to leading industry standards, including:

- ASTM F 2394-2007 – Standard Guide for Measuring Securement of Balloon-Expandable Vascular Stent Mounted on Delivery System

FEATURES

- Specialized for torque to failure and constant torque testing of guidewires and catheters
- Maintains peak torque value automatically for post-test analysis
- Overload protection, automatic zeroing, power-off memory, and fault detection ensure safe operation
- Real-time monitoring of torque curves, with local data storage and optional report printing
- High-accuracy torque sensor with resolution up to 0.01 mN·m
- Supports proximal and distal torque tests, as well as constant angle assessments
- Standard RS232 interface for PC connectivity and test automation
- Customizable fixtures and software configurations to match diverse testing needs

THEORY & METHOD

Test Principle

The sample is clamped onto a fixed mounting plate. Torque is applied and measured via a sensitive inline torque sensor. The system captures torque data in real time, enabling analysis of failure points, angle of twist, and constant torque behavior under dynamic or static loading conditions.

TECHNICAL SPECIFICATIONS

Specification	Value
Model	ToronMed™ TTGC04
Test Range	0–500 mN·m (customizable)
Accuracy	±0.5% FS
Resolution	0.01 mN·m
Clamping Range	0.3–4 mm diameter
Statistical Count Range	1–99,999 cycles
Test Modes	Constant torque / constant angle / torsional failure
Dimensions	2010 mm (L) × 400 mm (W) × 300 mm (H)
Voltage	AC 220V 50Hz / AC 120V 60Hz
Net Weight	15 kg

Standard Configuration

- Torque tester with integrated torque sensor

- Test fixture assembly
- PC software with communication cable
- User manual and quick-start guide

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