

Thread Friction Coefficient Tester

This PC controlled thread friction coefficient tester is used to test the mechanical properties of bolts, screws, and double-screw bolts. It allows for real-time monitoring and analysis of test results.



Product Overview

Precision Friction Coefficient Testing

This PC-controlled tester is engineered for the comprehensive analysis of threaded fasteners, including bolts and screws made of carbon and alloy steel. It enables precise evaluation of effective torque, clamping force, and friction coefficients, making it an essential tool for material verification and quality control. With user-friendly virtual instrumentation software, the system provides real-time data analysis, automated reporting, and dynamic curve visualization to support engineering design and manufacturing standards.

Performance Metrics

System Capabilities

- Calculates thread friction coefficient and supporting surface friction coefficient
- Digital PID servo control with dual closed-loop modes
- Automated torque, twist angle, and tightening force maintenance
- Overload and software-based safety protection
- Database-driven storage for long-term data analysis

Industry Standards

GB/T 16823.3-1997, QC/T 715-2004, GB/T 3098.9-2002

Technical Specifications

System Performance

100 N.m

Motion Torsion Device 1

500 N.m

Motion Torsion Device 2

Machine Components

Component	Function
Test bed & slide track	Structural foundation
Servo Motor & Reducer	Controlled rotation
Static twist device	Measurement unit
Electrical cabinet	Control integration