

ATT-110 Automatic Torque Tester

(Bench model)



The **ATT-110 Fully Automatic Torque Tester** utilizes state-of-the-art technology to measure the torque required to tighten or open caps on bottled products, spout pouches, and tubes. It complies with national and industry standards, including GB/T 17876, ASTM D2063, ASTM D3198, ASTM D3474, BB/T 0025, and BB/T 0034.

To operate, simply place the container on the testing platform and press the start button. A positioning clamp secures the container body, while a rotating cap-gripping fixture descends vertically to grip the cap. The system then rotates the cap to measure torque, displaying the values on the screen. Upon completion, the clamping mechanism releases, and all components return to their initial positions.

Key Features:

- An industry-standard instrument.
- Automatically displays and records real-time torque as well as peak torque values during both tightening and opening.
- Supports multiple testing modes and accommodates samples of various sizes.
- Allows for the review of individual results after multiple tests; automatically calculates averages, maximums, and minimums.
- Overload protection: Users can set a maximum torque limit, and the instrument will automatically stop if this limit is exceeded.
- Features PLC control with a touchscreen interface and stable rotation speed; data from the torque sensor is automatically collected by the control system and displayed on the screen.
- Output interface: Standard RS232 serial output.

**Product Advantages**

- Integrated design combining a lead screw module and a servo motor system ensures automated, precise processes and highly accurate measurement data.
- Wide measurement range, suitable for testing samples of various sizes.
- Simplified mechanical structure; compact desktop design. Built with high-quality components for exceptional durability.



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Technical Specifications

- Samples Types: Caps for bottled products, spouted pouches, and tubes
- Bottle Body Measurement Range:
 - Height: 20–350 mm;
 - Diameter: Ø 15–120 mm (Ø110–200 mm measurable with fixture change)
- Cap Measurement Range:
 - Diameter: Ø 18–50 mm (Ø45–80 mm measurable with fixture change)
- Measurement Range: 0–10 N·m (custom ranges available)
- Accuracy: ±0.5% of full scale
- Resolution: 0.01 N·m
- Units: kgf·cm / N·m / in·lb
- Measurement Speed: 15 seconds per cycle; tests one sample at a time
- Manual sample handling; operator manages sample quantity and placement
- Calibration Method: Suspended weight calibration
- Dimension: L520 x W510 x H1060 mm
- Weight: approx. 34 kg
- Power Supply: 110/220 VAC @ 50/60 Hz
- Air Supply Pressure: 0.4–0.6 MPa
- Main Unit Material: Aluminum alloy structure; 304 stainless steel housing
- Operating Environment:
 - Indoor use
 - Ambient temperature 5–40°C
 - Relative humidity: 90% @ 32°C (standard)

Safety Features

- Equipped with photoelectric switches
- Protective guards on moving parts
- Housing includes grounding and power leakage protection