



东莞市中谊精密仪器有限公司

Dongguan Zhongyi Precision Instruments Co., Ltd.

ZY-FZ-C 180-Degree Bending Fatigue Tester

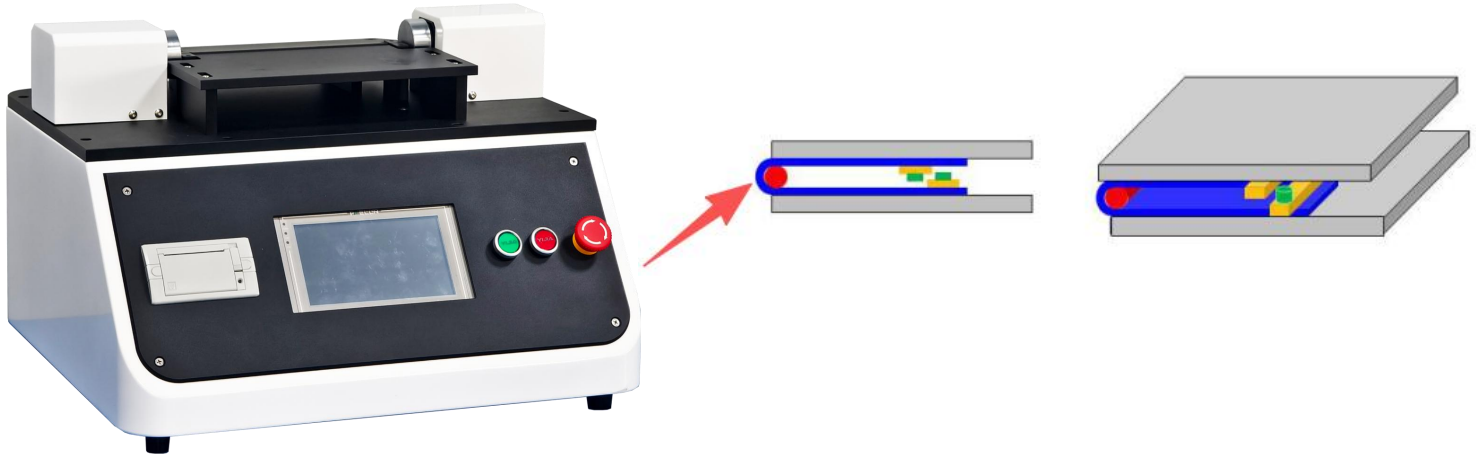


Diagram of a Static Bending Test Rig

I .Introduction

The ZY-FZ-C 180-Degree Folding Fatigue Tester is a high-precision testing instrument specifically designed to evaluate the fatigue resistance of flexible materials under repeated 180-degree folding cycles. By simulating the frequent folding conditions materials encounter in real-world applications, this equipment accurately assesses the number of folds a material can withstand and its fatigue life before failure.

II .Core Technical Advantages

1. **Intelligent Control** — Utilizes microcomputer and integrated circuit control to achieve automatic measurement and control, offering simple operation, high data accuracy, and stable, reliable performance.
2. **Touchscreen Operation** — 5-inch color touchscreen with a Chinese interface (English version available), allowing for intuitive and quick parameter settings and real-time display of test data.
3. **Flexible Adjustment** — The folding angle (0 - 180°), test speed (5 - 65 cycles/min), bending radius (R1/R2/R3 mm, customizable), and dwell time (0 - 99 s) can all be freely set to meet the requirements of different testing standards and materials.
4. **Data Security** — Test data is automatically saved, and the system features power failure protection to prevent data loss caused by unexpected power outages.
5. **Report Output** — An embedded thermal mini-printer allows reports to be printed directly upon test completion, facilitating archiving and quality traceability.
6. **Automatic Shutdown** — When cracks or fractures appear in the material, the device automatically stops and saves the data, ensuring accurate and reliable test results.
7. **Expanded Features** — Optional modules such as on/off functionality, resistance connection, and resistance data export are available to meet special testing requirements.



III. Main technical parameters

Power Supply Voltage	AC 220 V \pm 10%, 50 Hz (AC 110 V \pm 10%, 60 Hz available upon request)
Operating Environment	Temperature: 10–35 °C, Relative Humidity: \leq 85%
Display	5-inch color dot-matrix touchscreen
Measurement Range	0–180° (Adjustable and displayed via touchscreen)
Test Count	0–999,999 times
Test Speed	5–65 times/min
Data Output	Mini thermal printer
Bend Radius	R1/R2/R3 mm (Other sizes available upon request)
Dimensions	580 × 490 × 360 mm
Net Weight	Approx. 35 kg
Dwell time	0–99 s (configurable)
Folding table	200 × 150 mm (two, one at the front and one at the rear)

IV. Product Specifications

Standard Configuration: Main unit, built-in mini printer

Optional Configuration: Continuity test / Resistance measurement / Resistance data export