

Crumple Flex Tester



The Crumple Flex Tester is designed to determine the flexing and crumpling resistance of coated fabrics. By applying controlled torsion and axial compression to a cylindrical specimen, the instrument reproduces the mechanical stresses encountered during repeated use. The results provide reliable data for evaluating coating durability and water-resistance stability, supporting material development, quality control, and product certification.

Test principle

A rectangular coated-fabric specimen is sewn into a cylindrical shape and positioned between two discs.

- One disc oscillates on its axis through approximately 90°, generating torsion in the specimen.
- The opposite disc moves reciprocally along its axis, compressing the specimen along its length

The combined twisting and compression continue until a preset number of cycles is completed or visible damage appears. This method accelerates flex-fatigue effects and provides an accurate indication of coating performance during service.

Standards

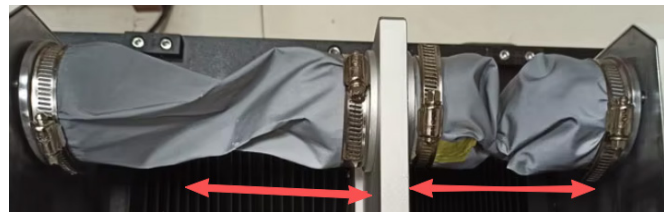
ISO 7854, Method C, GB/T 12586, Method C

Technical Features

1. PLC controlled and HMI touch screen operated
2. Directly conforms to major international test standards
3. Stable mechanical design with consistent operation
4. High-accuracy angle and speed control
5. User-friendly operation with preset cycle counter
6. Cost-effective solution for routine QC and laboratory research

Standard accessories

Hose clamps × 8; Power cable; User manual



Technical information

- No. of Test Stations: 4
- Disc Diameter: 63.5 mm
- Disc Width: 15 mm
- Twist Angle: $90^\circ \pm 2^\circ$
- Twist Speed: 200 ± 10 r/min (≈ 3.33 Hz)
- Compression Stroke: 70 mm
- Compression Speed: 152 ± 4 r/min (≈ 2.53 Hz)
- Inner Distance Between Cylinder Flanges: Max. 180 ± 3 mm
- Sample Size: 220*190mm
- Flex Times: 999999 times, settable
- Power: AC 110-220V, 50/60HZ

