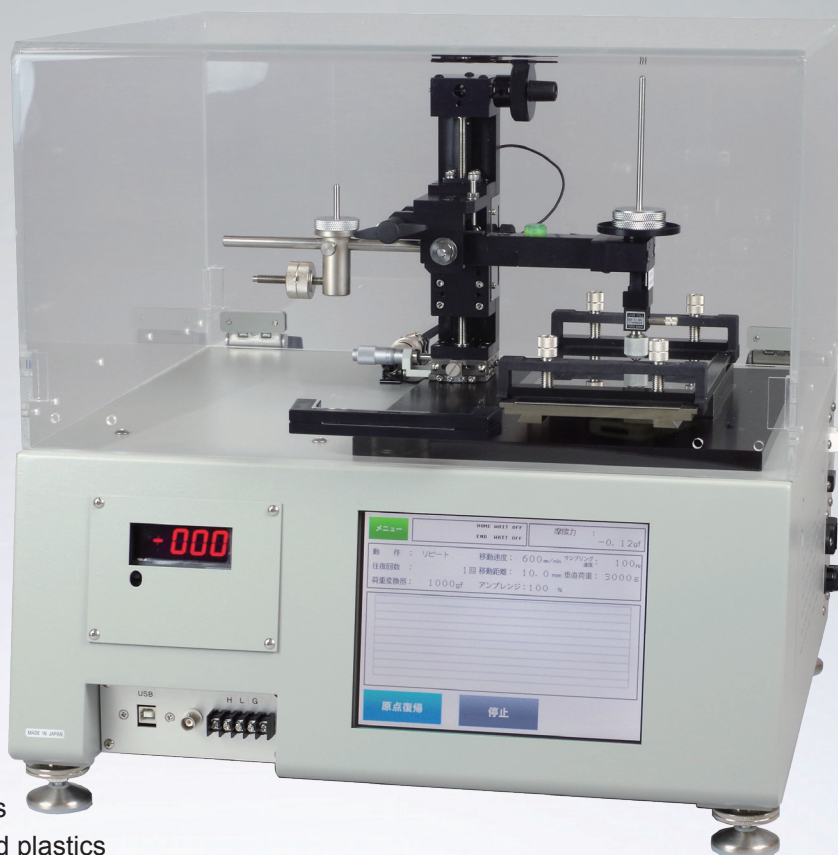


Friction and Wear Tester

TYPE: 40

Applications (examples)

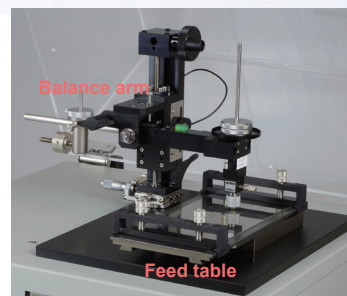
- Friction and wear testing on new materials
- Evaluation of various lubricants
- Evaluation of papers, films, and plastics
- Friction, wear, and scratch testing on various coating films



45 years of experience in manufacturing and sales of friction and wear testers.

Through interaction with over 1,000 users of our products, the new right-angle crossing balance arm system, based on the know-how on friction and wear tests, has been introduced. Equipped with a load converter containing a probe integrated into a holder, the tester has been improved for easier operation. With the optional software "TriboSoft", various measurements, from static friction coefficient measurement to both-way wear measurement, can be easily made, analyzed, and maintained.

The right-angle crossing balance arm, which is designed to cross the feed table at right angles, can measure frictional forces in forward and backward motions with a higher accuracy.



Real-time measurement of changes in frictional resistance due to wear

- By repeatedly generating friction in reciprocating motion, the stroke count at which a surface condition has changed and peeling of a film has occurred is determined from an increase or decrease in the frictional resistance.

Large flip-up acrylic cover and quick and easy sealing function

- Equipped with a large flip-up acrylic cover, which can be used during a test, as a standard component. Optionally, the cover can be used for easy and quick sealing.

Standardly-equipped Y-axis stage

- The stage moves with a stroke of 13mm in Y-direction, saving the effort in testing.

Various measurement jigs

- A wide variety of TRIBOGEAR measurement jigs, including not only point contact measurement jigs (e.g. scratch test pin and ball indenter), but also plane contact jigs (e.g. flat indenter) and line contact jigs (e.g. blade holder) can be used.

Key Specifications

Stroke speed	5 to 6000mm/min
Arm	Right-angle crossing balance arm Y-direction stroke: 13mm
Drive system	Rack and pinion AC servo motor
Stroke length	1 to 100mm
Stroke mode	Single mode: Automatically stops upon reaching a preset travel distance Repeat mode: Reciprocating motion with a preset stroke length (up to 99,999,999 times)
Measuring range	0 to 9.8N
Table dimensions	240mm x 120mm
Safety features	Overload safety device High-frequency noise suppression circuit
Dynamic strain amplifier	Zero-point adjustment range: (Manual adjustment) $\pm 0.5\text{mV/V}$ or less (Automatic zeroing) $\pm 0.5\text{mV/V}$ or less Output (non-linear): 0 to $\pm 5\text{V}$ ($\pm 0.01\%$ FS or less) Zero drift: 0.01% F.S./°C Gain drift: 0.01% F.S./°C Low-pass filter: Approx. 500Hz
Operating environment	0 to 50°C, 85% RH or less (non-condensing)
Power supply	AC100V, 50/60Hz
Overall dimensions	W: 470mm x D: 450mm x H: 475mm (excluding protruding portions)

