

SURFACE PROPERTY TESTER

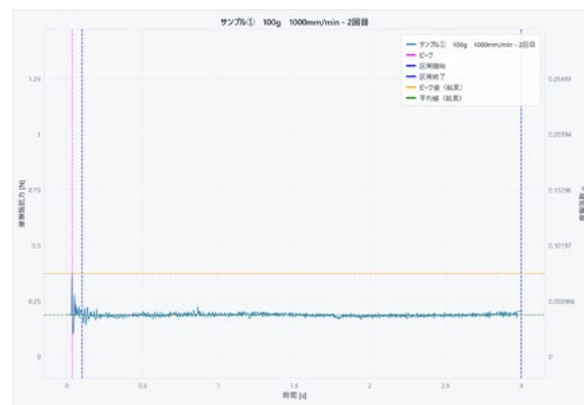
Friction of films, paper and sheets — to the standard, with one unit.

From static and kinetic friction coefficients to scratch hardness, tackiness and peel.
A multi-functional surface property tester compliant with major JIS and ASTM standards.



5–6,000 mm/min

TYPE:14FW / PRODUCT



TriboSoft Lab ready

Customers call the TYPE14FW the “HEIDON type”

Japan's most widely used desktop friction & wear tester. Running as the standard machine at major manufacturers.

01 Supported standards

ASTM D 1894

JIS K 7125

JIS K 7317:2022

JIS L 0849 Type I

JBMS-88

JIS K 5600

02 Typical applications

FILM

Lot control of slip

Compare static / kinetic friction coefficients of packaging films and sheets

PAPER

Paper dust & runnability

Evaluate copy-paper dusting from friction force (JBMS-88)

COATING

Coating durability & scratch

Capture coating damage and film-peeling points

ADHESIVE

Peel & tensile resistance

180° / T-peel of adhesive tapes and labels

Friction · scratch · wear · adhesion · peel

One unit, many uses — just change the jigs.

0–2,000 gf

Six surface evaluations, with one unit.

Styli, jigs and conditions can be reconfigured to match each test theme.

01

Static & kinetic friction coefficient

Surface, line and point contact; sample-to-sample pairs. Mean kinetic friction also displayed.

02

Scratch & pencil hardness

Evaluate scratch hardness from scar width. Pencil scratch strength testing supported.

03

Quantifying tackiness

Quantify surface tack from the rolling resistance of a stainless roll.

04

Wear & durability

Record changes over reciprocating wear in real time and identify when coating peeling starts.

05

Thin-film adhesion

Increase vertical load stepwise and derive the critical load from resistance changes.

06

Peel & tensile

180° / T-peel and horizontal tensile strength measurement.

02 Measuring range in numbers

5–6,000

mm/min traverse speed

1–100

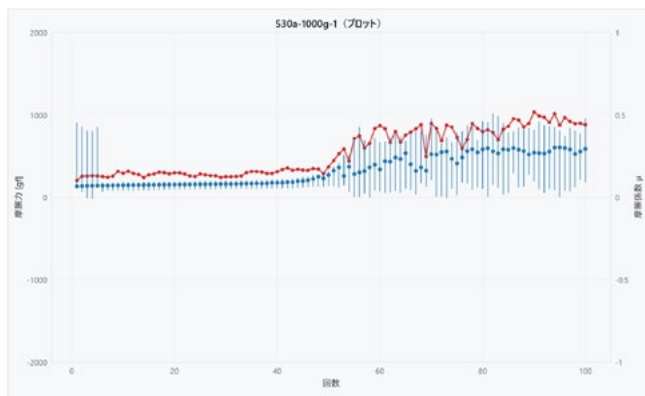
mm traverse distance

99,999,999

max. reciprocating cycles

03 Follow wear right down to the cycle where it occurs

Reciprocating cycles vs. friction resistance



Main specifications

Measuring range	0–100 gf / 0–2,000 gf
Drive	AC servo / rack & pinion
Table	240 × 120 mm
Mode	Single / repeat
Dimensions	W630 × D350 × H580 mm
Power supply	AC100V 50/60Hz
Options	TriboSoft, various styli, hot plate, cooling unit, Y-axis stage, etc.

Choosing within the series

Standards-focused **TYPE:38P/F**

3-D wear analysis **HHS2000S**

Multi-purpose **14FW**

First, try it with your own samples.

Demo tests, contract testing and model-selection consulting are available.

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Product page



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