

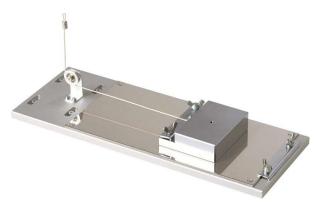
# Coefficients of Friction Fixture COF Series

Designed for coefficients of friction (COF) test of film and paper Complies with the corresponding parts of ISO and JIS standards Optional Software available for automatic calculation of COF



Horizontal Type: COF2-2N-J





Vertical Type: COF-10N-V-J



Coefficients of Friction Test Image (Paper)

# Related Standard

- **-ISO 8295:1995** Plastics -Film and sheeting-Determination of the coefficients of friction (Partly) (When COF2-2N-J or COF-2N-V-J is used) (Corresponding Japanese standard: **JIS K7125:1999**)
- **-JIS P8147:2010** Paper and board-Determination of the static and kinetic coefficients of friction (Partly) (When COF2-10N-J orbCOF-10N-V-J is used)



How to install test sample (COF2-2N-J)			
Fix the sample to the table.	Adhere the sample to the weight.	Hook the cord of weight to the attachment of force gauge. (*1)	

<sup>\*1</sup> The supplied standard attachment A-1 of force gauge is used.

Specifications				
T	For film		For paper	
Type	Horizontal type	Vertical type	Horizontal type	Vertical type
Model	COF2-2N-J	COF-2N-V-J	COF2-10N-J	COF-10N-V-J
Weight of weight	200g (Approx. 2N) 1000g (Approx. 10N)			
Sample thickness	Max. 1.5mm			
Stroke	Max. 150mm			
Dimensions	See [Dimensions]			
Table weight	Approx. 2.0kg	Approx. 1.9kg	Approx. 2.0kg	Approx. 1.9kg
Compatible test stands *1	MH2-500N	EMX series MX2 series MX series	MH2-500N	EMX series MX2 series MX series
Compatible force gauge *1	Digital force gauge ZTS/ZTA series			

<sup>\*</sup> Weight of the attachment is also applied as a load on the force gauge. Consider it when selecting the capacity of a force gauge.

## Choice of Weights available separately

Weight Models				
Tuna	For	film	For p	aper
Type	Horizontal type	Vertical type	Horizontal type	Vertical type
Model	COF2W-2	COFW-2-V	COF2W-10	COFW-10-V
Weight of weight	200g (Approx. 2N)		1000g (App	orox. 10N)

## [Customization Service]

Customization Service: Application Example		
ASTM D1894-14		
Standard Test Method for Static and Kinetic Coefficients of Friction of Plastic Film and Sheeting (Partly)		

<sup>\*</sup> The customized model enables you to carry out COF test according to a part of ASTM standard. Contact us for details.

<sup>\*</sup> The supplied standard attachments A-1, S-1, or SR-1 is recommended for COF test.

<sup>\*</sup> The testing results by horizontal type and vertical type may be different. Please compare the results by using the same type of product.

<sup>\*1</sup> Contact us for compatibility of other models of test stands and force gauges.



#### **Examples of Product Configuration COF2-2N-J**

Example Code: 1C2003A

Coefficients of friction test according to a part of JIS K 7125:1999 and ISO 8295:1995 by using horizontal type test

stand and optional attachment.

Force-Displacement Measurement Unit: FSA-0.5HK2-5N-NEXT

(-NEXT: Downloadable Graphing Software Option)

Optional Attachment: COF2-2N-J

Additional Function: Friction Testing Module (Download Card Basic)



#### **Examples of Product Configuration COF-2N-V-J**

Example Code: 1C2004A

Coefficients of friction test according to a part of **JIS K 7125:1999** and **ISO 8295:1995** by using vertical type test stand and optional attachment.

Force-Displacement Measurement Unit: FSA-0.5K2-5N-NEXT

(-NEXT: Downloadable Graphing Software Option)

Optional Attachment: COF-2N-V-J

Additional Function: Friction Testing Module (Download Card Basic)



#### **Examples of Product Configuration COF2-10N-J**

Example Code: 1C2005A

Coefficients of friction test according to a part of JIS P 8147:2010 by using horizontal type test stand and optional attachment.

Digital Force Gauge: ZTS-50N

Horizontal Motorized Test Stand: MH2-500N

Optional Attachment: COF2-10N-J

Optional Cable: CB-528

Downloadable graphing software: Force Recorder Next Standard Additional Function: Friction Testing Module (Download Card Basic)

# **Examples of Product Configuration COF-10N-V-J**

Example Code: 1C2006A

Coefficients of friction test according to a part of JIS P 8147:2010 by using vertical type test stand and optional attachment.

Digital Force Gauge: ZTS-50N

Vertical Motorized Test Stand: MX2-500N Optional Attachment: COF-10N-V-J

Optional Cable: CB-528

Downloadable graphing software: Force Recorder Next Standard Additional Function: Friction Testing Module (Download Card Basic)

<sup>\*</sup> Product configuration varies depending on the shape and characteristic of the sample, and measurement conditions.

<sup>\*</sup> The recommended capacity of force gauge varies depending on the expected force to be loaded.

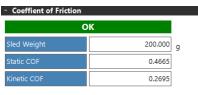


#### [Related Software: Online Download Version]

#### **Downloadable Graphing Software: Force Recorder Next series**



▲ Force Recorder Next Professional



▲ Friction Testing Module

High sampling rate of max. 2000Hz enables accurate graphing.

- Force Recorder Professional: for graphing force-time / force-displacement.
- Force Recorder Standard: for graphing force-time.
- Test condition presets: for effective recording / analysis of measurement results.
- Data editing: overlaying up to 10 graphs, etc., for results editing / analysis.
- Add Images / Comments function: useful for recording measurement data details.
- The Print Command allows images and statistics output in a file form: PDF/Word/Excel.

# [Additional Function: Friction Testing Module with Download Card Basic]

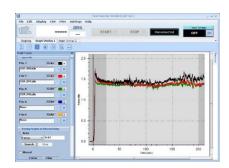
A function is available for additional installation at cost, for the Force Recorder Next series.

- The static and average kinetic COF is automatically calculated and displayed after each measurement by entering weight and other required details before measurement.
- Some pre-registered standards, such as JIS K7125:1999, are installed in the measurement conditions for easy configuration according to the individual requirements.

NOTE: An internet connection is required at all times to use all functions on the IMADA connected. For software online downloads, a purchase of a download card is required with a prior user/product registration on IMADA connected. Product registrations are limited for Next Series products (e.g. ZTA/ZTS Series with firmware version 5.00 or later).

#### [Related Software: CD version]

#### **Graphing Software: Force Recorder Standard COF Version**



- High sampling rate of max. 2000Hz enables highly accurate graphing
- Plots Force vs Time graphs
- By entering weight of the Weight, the static and average kinetic COF are automatically calculated and displayed
- Varieties of data editing functions, such as graph overlaying up to 5 graphs, enable smooth analysis of the measurement results.
- Add Images / Comments function: useful for recording measurement data details
- The Print Command allows images and statistics output in a file form: PDF/Word/Excel

OS	Windows 8.1/10/11
Hardware	CPU: 1GHz or more or more is recommended.
	Memory: 2GB or more is recommended.
	Hard disk (data storage area): 10GB or more is recommended.
Platform	.NET Framework4.8 or later
Image size	Resolution 1024×768 pixel or more

<sup>\*</sup> Some old versions of Excel show data up to 65,531 only.

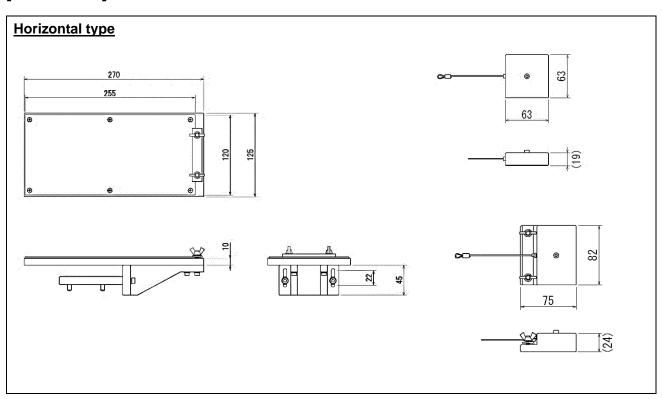
NOTE: Force Recorder Professional CD version, the force-displacement graphing software, does not offer automatic calculation of the friction coefficient. For details, please refer to the individual specifications or contact us.



# [Related Products]

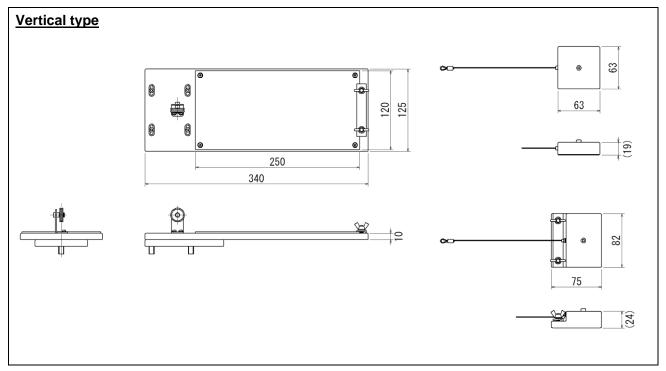
-	
Film Grip FC-21/20/40/21U/41U/21UQ	Cam Grip <b>GR-30/2000</b>
Ideal for gripping thin samples such as film. A wide range of product models are available to fit your needs.	Ideal for gripping thin and rectangle shaped samples such as paper and sheet.
Fixture for Film Sticking Test TKS-20N/250N	Variable Weight Reciprocating Friction Test Jig  VWF-10N-J
Designed for sticking test of thin samples such as film.	For COF tests for Flat Specimen and a Contactor

# [Dimensions]



Unit: mm





Unit: mm

# [Cautions]

- Information in this document is subject to change without prior notice.
- This document is product descriptions and handling precautions, and do not guarantee various characteristics or safety.
- This product is designed for force measurement purpose only.
- Do not copy and use this content without authorization.
- A force gauge (sold separately) is required to use this product.
- Some samples may not be suitable to measure with this product.

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Visit our website for more information on wide product specifications, measurement applications and videos.