



## FRICTION TESTER INCLINED PLANE



## **TYPICAL APPLICATIONS FIELDS**

Cosmetics industry

Packaging industry

Paper and carton manufacturing

Lab substrate measurement

Packaging control

Whatever your industry, we understand and develop solutions for many applications. For a personalized approach, contact us at <a href="mailto:instruments@sofraser.com">instruments@sofraser.com</a>

## FRICTION TESTER INCLINED PLANE (FTIP): A SIMPLE AND RELIABLE SYSTEM FOR SLIP RESISTANCE MEASUREMENT

Sofraser's FTIP, with its motorized, inclined platen, uses the simplest technology for the dynamic coefficient calculation of slip resistance measurement.

The sample slips off the plate when the average dynamic frictional force (Fd) value is reached. The integrated electronic device automatically provides the angle at which this takes place and chronometers the amount of time it took for the sample to slip between two optical cells.

- Reliable measurement: With its motorized platen, sensitive optical cells, and electronic angle and speed calculation, uncertainty is removed thus providing consistent slip measurement that follows manufacturing or packaging operations.
- **Simple operation:** Just prepare the samples, place them on the platen, and push the start button. The measurement is accomplished in a few seconds.
- Versatility: The two weight configurations and the adjustable optical sensors adapt to many sample sizes.
- Complete solution: The slip time and angle values determine the slipping coefficient. A corresponding formula integrated into the electronics provides directly the friction dynamic coefficient.
- Durable investment: Sofraser's IPFT has non-wearing parts, boasts a robust design, requires minimal maintenance, and provides a rapid return on investment plus long-term profitability for many industries.



FEATURES AND SPECIFICATIONS			
	Angle	Dynamic coefficient	
Range	• 0°-45°		
Resolution	• 0.1 °	• 0.001	
Repeatability	• ± 0.2 °	• 0.01	
Sliding speed	• 1.71 ± 0.05 °/s (betwe	1.71 ± 0.05 °/s (between 5 ° and 30 °)	
Chronometer display	• 0.01 s		
Optical cells	<ul> <li>min. 23 mm – max. 1</li> </ul>	150 mm (1" min 6" max.)	
Sled sizes / weight	<ul> <li>40 x 20 x 85 mm and 566 g         <ul> <li>(1.5" x 0.7" x 3.3" / 1.2 lbs)</li> </ul> </li> <li>20 x 20 x 60 mm and 188 g         <ul> <li>(0.7 x 0.7 x 2.3" / 0.4 lbs)</li> </ul> </li> </ul>		
Power	<ul><li>220 VAC 50/60 Hz</li><li>110 VAC in option</li></ul>	220 VAC 50/60 Hz	
Overall Size	• (h) 400 mm (w) 400 (h) 18" (w) 20" (l) 19"	(h) 400 mm (w) 400 mm (l) 650 mm max. (h) 18" (w) 20" (l) 19"	
Weight	<ul> <li>16 kg / 35 lbs</li> </ul>		



Adjustable platen and optical cells



Sleds

## INCLINED PLANE FRICTION TESTER

In 1981, Sofraser invented & patented the world's first vibrating viscometer at resonance frequency also called tuning-type.

The vibration amplitude varies according to the viscosity of the product in which the rod is immersed.

The active part of the sensor, a vibrating rod held in oscillation at resonance frequency, is driven by constant electrical power.

Sofraser remains unsurpassed regarding process reliability and accuracy.





