# CELL INSTRUMENTS | Material Testing Solutions

#### **COF-03 Inclined Plane COF Tester**

# **Application**

COF-03 Inclined Plane COF Tester is designed to determine the coefficient of static friction of various packaging materials.

In the test, the angle at which one test surface begins to slide against another inclined surface is measured, when the inclined angle is increased at a constant and prescribed rate.

The test is frequently referred to as slide angle. The static coefficient of friction is numerically equivalent to the tangent of that angle.

### Signifcance

The inclined plane coefficient of friction test is crucial for packaging materials. By predicting packaging stability, reducing sliding damage, optimizing material selection, and enhancing product quality, this test ensures reliability and safety during stacking and transportation. It lowers product damage and costs, increases customer satisfaction, and bolsters brand reputation. Therefore, the inclined plane coefficient of friction test is an indispensable tool for manufacturers in designing packaging solutions, optimizing product transportation and storage, and ensuring market success and sustainability.

# **Principle**

One specimen is clamped to an inclined plane, the other to a rubber-faced sled. The sled is placed on the inclined plane and the plane raised until the sled begins sliding. The coefficient of static friction is equal to the tangent of the angle at which sliding begins.

#### **Features and Benefits**

- 1. PLC control and HMI touch screen operated; Stable and durable service life
- 2. Real time display of max, min, average and SD of test result; accurate and labor saving
- 3. In accordance with multiple international standards; multiple sled options
- 4. Both angel and static COF (tangent value) can be measured; Versatile
- 5. Dot matrix type microprint embedded; test result easy printing
- 6. RS232 and profession software (optional)

#### Standards:

ASTM D202, TAPPI T815, TAPPI T548

Main Parameters	
Angle Range	0° ~ 60°
Accuracy	0.01°
Sled	200g, 235g, or 1300g (choose one or others)
Speed	0.1°/s ~ 10.0°/s
Power	110~220V 50/60Hz



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