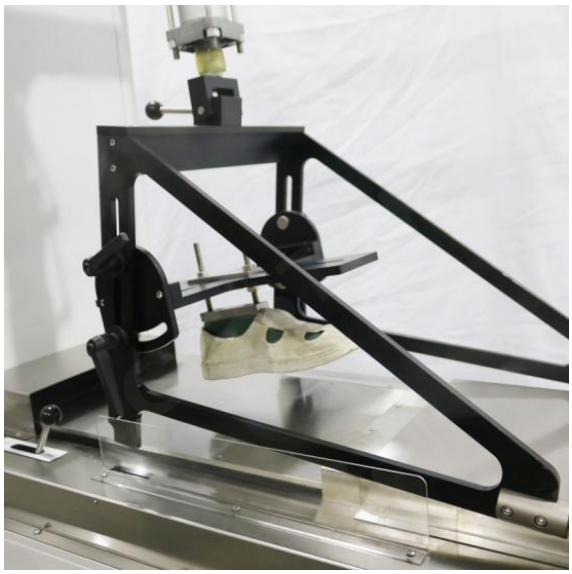
Test Method: SATRA TM144

RESOTECH SLIP RESISTANCE TESTER
MODEL NO. RESOTECH SCH-049



This method determines the coefficient of friction between footwear and test floors under conditions simulating those experienced in the phases of a typical walking step when s
lip is most likely to occur.
The Machine is designed to measure the coefficient of friction between the shoe sole material and a standard floor surface. This machine is applicable to all types of footwear, outsole unit, heel, top pieces and sheet soling materials.
The method is applicable to all types of footwear (except pram shoes), outsole units, heel top-pieces (top-lifts) and sheet soling materials, also to all types of test floors, including ice, turf and gravel and with or without surface contaminants, for example, liquid water, oil and grease.

Principle

The footwear item and the test floor are brought into contact, subjected to a specified vertical force for a short period of static contact and then moved horizontally relative to one another at a constant speed. The horizontal frictional

force is measured at a given time after movement starts and the dynamic coefficient of friction is calculated for the particular conditions of the test.

APPLICATION

Slip Resistance Tester: Apply a predetermined load by different mediums like wood, PVC, ceramic tile or specified and set specified friction times and speed, which is to measure the sole friction coefficient, and then judge the slip resistance of shoes.

SPECIFICATION

Key Specifications

Model	RESOTECH SCH-049
Vertical load cell range	1000N
Horizontal load cell range	1000N
Sliding speed	(0.3±0.03)m/s
Static contact time	0.5s
Test normal force	500±25N, For footwear of European size 40 (UK size 6.5) and above
	400±20N, For footwear of European size below 40 (UK size 6.5)
Wedge angle gauge	7°
Control method	Computer-controlled
Monitor	19-inch
Test floor	Pressed ceramic tile floor, stainless steel plate
Power supply	AC 220V 50/60HZ
Dimensions	180×90×130 cm
Weight	240 kg
Standards	ISO 13287, GB/T 28287, ASTM F2913, SATRA TM 144, ISO 24267