



## Slipperiness Resistance testing (ISO10545-17/DIN 51130/DIN 51097)

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### Pendulum

#### Overview

The Wessex Pendulum Skid Tester is used in many applications to test the slip resistance of wet and dry surfaces, both at the design stage and in the investigation of accidents. According the Standards BS 812 Pt 114 and EN 1097-8. It meets with the requirements of ISO10545-17

#### Details

Based on the Izod principle the Wessex Pendulum Skid Tester consists of a tubular arm rotates about a spindle attached to a vertical pillar. At the end of the tubular arm a head of constant mass is fitted with a rubber slider. The pendulum is released from a horizontal position so that it strikes the sample surface with a constant velocity. The distance travelled by the head after striking the sample is determined by the friction of the sample surface. A reading of Skid



Resistance Values is obtained and by the suitable conversion table you can get also the co-efficient of friction.

#### Features

The Pendulum Skid Tester measures the frictional resistance between a rubber slider mounted on the



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end of a pendulum arm and the test surface

The unit can perform to the following Standards: BS 6077 Pt 1 (clay and calcium silicate pavers for flexible pavements), BS 7044 (artificial sports surfaces: person/surface interaction), BS 7188 (impact absorbing playground surfaces), BS 8204 (in-situ flooring, part 3 Code of practice for polymer modified cementitious wearing surfaces), ASTM E303 (Standard Method for Measuring Surface Frictional Properties Using British Pendulum Tester)

### Equipment

\* Pendulum Skid tester in strong carrying case

calibrated and certificated

5 Sliders (specified by buyer) TRL or 4S according the Standards required.

Dimensions: 720x730x220 mm

Weight: 28 kg

When buying this item, you may also be interested in a calibration rig (the pendulum should be recertified every 12 months)

Also, a Surface Roughness Meter - required as part of the ISO test





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## Product Codes

Wessex Pendulum Skid Tester ISO 10545-17/PENDULUM

Calibration Rig for Pendulum Skid Tester WESSEX/RIG

SPARE PARTS

C05772 Replacement 4S Rubber fitted to metal foot

C05801 - Slider TRL for skid tester

C05773 - Slider TRL 3" for skid tester

C05805 - LAPPING PAPER FOR SLIDER RUBBER

(Paper recommended for conditioning slider and checking skid tester C05160 for use with floor testing. (Pk10) 3 micron type)

Crignon Standard tile for calibrating PSV sliders -CRIG

Base plate to secure the Crignon standard CRIG-BASE



## Tortus III

### Overview

The new Tortus 3 Coefficient of Friction Tester is the most advanced version of the original BCRA designed instrument, using the latest technology available on the market today

### Details

TORTUS III a self-propelled microprocessor controlled precision instrument which directly measures



the dynamic coefficient of friction, as it traverses a surface or flooring material used by pedestrians.

The battery-operated instrument can be used to test the resistance to skidding of a wide variety of flooring surfaces including ceramic tiles in both dry and wet conditions.

Results can be downloaded to a PC via a USB connection. The benefit of this is that the unit does not require and connecting cables either to a mains supply or to a PC making it completely portable

The Tortus III provides an instantaneous reading of Coefficient of Friction on a digital display as it moves across the surface and displays the average value of at the completion of the test. The measurements are recorded to memory and can be retrieved using the USB Memory Stick.

Dimensions of the instrument 42.5 x 24.5 x 16.0 cm high

Instrument weight 6.00 Kg

Instrument weight with carry case 11.00 Kg

Power Requirement for charging 240 volt single phase 50Hz

(240 volt /12 volt Charger and cable supplied)

Operating voltage once fully charged 12 volt DC internal battery pack



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(NIMH NICD assembly ten battery cells)

Friction foot material Type Four S rubber

In addition to the above supplied together with: -

Instrument carry Case

USB Memory Stick

Conditioning tool for rubber foot

When buying this item you may also be interested in a Surface Roughness Meter - which is require as part of the ISO test

[Product Code](#)

Tortus III Coefficient of Friction Tester TORTIII

Replacement 4S Slider TORT4S

Replacement Strain Gauge TORTSG

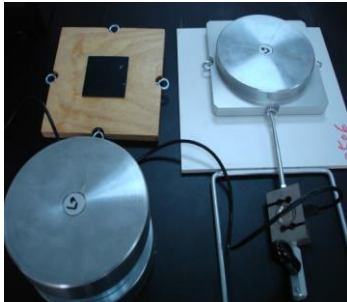


## ISO 10545-5 Slipperiness Tester Pull Meter (Static Coefficient of Friction Tester)

### Overview

A Pull Meter to measure the static coefficient of friction of surfaces according the ceramics testing standard ASTM C 1028 and ISO 10545-5 annex B (not approved)

### Details



The Pull Meter can be used to perform tests on tiles and other flooring surfaces in both dry and on wet condition.

The measured value is shown in kg on the display in the control panel and both the static coefficient of friction and the average of values can be calculated from the available menu.

### Features

- \* Formed with a wooden base (200x200x20 mm) on to which is stuck "Neolite" (3'x3'x1/8') according to ASTM and Standard rubber 4S according to ISO Standard
- \* Display in real time of the measured value expressed in kg
- \* Calculation of the static coefficient of friction and the mean values is done through the menu
- \* Power supplied through an external plug to the 230 V, 50 Hz, one-phase, 55 W or by the enclosed 9 V battery

When buying this item you may also be interested in a Surface Roughness Meter - requires as part of the ISO test



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Product Code

Pull Meter 10545-5/PULL

Spares

External Printer PULL/PRINT

Calibration Kit ISO 10545-17/CALKIT

SPARE PARTS

Rubber Sheet 4S (75X75X3 MM) IHRD 96±2 according the ISO International Standard 10545-17

Annex B

Base with 4S Rubber attached



## Ramp Slipperiness Tester to DIN 51130/DIN51097

### Overview

Ceramic testing equipment to measure the Dynamic Coefficient of Friction of flooring surfaces.

According to the Standards DIN 51130, DIN 51097 and ISO 10545-17 Annex C and the Australian Standard. The unit can be used for either wet or dry testing

### Details



The DIN Ramp Tester comprises of a frame to which is fitted a moveable ramp. There is a water reservoir which enables the surface under test to have a constant flow of recycled water. The frame is also fitted with a harness which is used to ensure the safety of the tester

Before the test, the surface to be tested (minimum 100x50 cm) and the operator's shoes are lubricated. The operator, faces "downhill", and moves forwards and backwards with steps that are as long as the length of the shoe. The ramp slipperiness meter will increase the angle at a rate of no more than 1° per second. The angle in which the operator reaches the limit of security is noted. The critical angle is determined by averaging several tests, by at least two operators

### Features

Inclinable platform from 0° up to 45° (600x2000 mm) driven by an hydraulic cylinder

A water circulating pump that is required to test surfaces according to the 51097 DIN

Handrail and safety sling

Maximum speed of inclination of 1°/s

Inclinometer with accuracy of  $\pm 0,1^\circ$  for the determination of safety

critical angle

Power 400 V, 50/60 Hz, three phases, 850 W



### Equipment





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Inclinometer

Mobile control panel controlled by the operator

Water recirculation pump to execute tests according to the DIN 51097 Standard

Safety harness K4 CEEN 385 fitted with rope for harness FP CEN 35

Dimensions: 2750x1350x3750 mm

Weight: 290 kg nett

IT SHOULD BE NOTED that the Standardization Panels are designed to give a consistent result where different testers use the equipment in accordance with the DIN and Australian Standard. They DO NOT calibrate the instrument

When buying this item, you may also be interested in a Surface Roughness Meter - required as part of the ISO test

The standard also suggests a metronome to pace the steps

## Product Codes

RAMP SLIPPERINESS METER for the ceramic testing standard DIN 51130

## Accessories

Shoes

Pair of shoes size 42 Picasso type with sole hardness shore-a 72  $\pm$ 2 and engraving according the standard DIN 51130 to make tests using the ramp slipperiness meter.

STANDARDIZATION PANEL TYPE E-10,7°

Reference tile panel type E - 10,7° to calibrate the ramp slipperiness meter C03463 according the Standard DIN 51130. Panel dimensions approx. 1.000 x 500 mm with tiles 152x152x10 mm.

STANDARDIZATION PANEL TYPE P-18,2°

Reference tile panel type P-18,2° to calibrate the ramp slipperiness meter C03463 according the Standard DIN 51130. Panel dimensions approx. 1.000 x 500 mm with tiles 151x151x12 mm.

CALIBRATION PANEL TYPE R-26,8°



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Reference tile panel type R - 26,8° to calibrate the ramp slipperiness meter C03463 according to the Standard DIN 51130. Panel dimensions approx. 1.000 x 500 mm with tiles 151x151x12 mm.

STANDARDIZATION "A" DIN 51097

Reference tile panel type A to calibrate the ramp slipperiness meter C03463 according to the Standard DIN 51097. Panel dimensions approx. 1.000 x 500 mm with tiles 242x117x11 mm

STANDARDIZATION "B" DIN 51097

Reference tile panel type B to calibrate the ramp slipperiness meter C03463 according to the Standard DIN 51097. Panel dimensions approx. 1.000 x 500 mm with tiles 241x117x11,5 mm

STANDARDIZATION "C" DIN 51097

Reference tile panel type C to calibrate the ramp slipperiness meter C03463 according to the Standard DIN 51097. Panel dimensions approx. 1.000 x 500 mm with tiles 149x149x11 mm