

Slipperiness / Skid Testers

SLIPPERINESS DYNAMIC, TORTUS 3 MOD.

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 and is a replacement for the Tortus II.

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. The results can be displayed and down-loaded 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.

Technical specification: Tortus 3: a self propelled microprocessor controlled precision instrument which measures directly the dynamic coefficient of friction, as it traverses a surface or flooring material used by pedestrians.

It provides an instantaneous reading of Coefficient of Friction on a digital display as it moves across the surface and displays the average value of μ ; at the completion of the test.

The measurements are recorded to memory and can be retrieved using the supplied USB Memory Stick.

- Dimensions: 42.5 x 24.5 x 16.0 cm
 - Weight 6 kg
 - Weight with carry case 11 kg
 - Power supply 240 V 50Hz
 - 240/12 V Charger and cable supplied
 - 12 Vdc internal battery pack (NIMH NICD)
 - Friction foot material Type "Four S" (96) rubber
- Supplied with Instrument carry Case

- Spares: - Four S (96) rubber foot -Leather test foot



Product Code: 01CI5005

SLIPPERINESS DYNAMIC, BOT3000E MOD.(EXPANDED KIT)

The BOT-3000E is the third generation design of the most recognized, advanced, and portable digital tribometer in the world today. The device continues to employ the original self-propelled drag-sled principle defined in Germany. It has been carefully designed to avoid the use of springs, actuators, dials, heavy weights, or other components that can lead to premature wear or mechanical fatigue. It can also export collected test results within a secure pdf file format that includes a numerical traceability mechanism. The unit can accurately measure static coefficient of friction (SCOF) and dynamic coefficient of friction (DCOF), wet or dry. The device is designed primarily for use on common hard-surfaced, interior space flooring, however it has also been used to determine the slip-resistance of other materials such as paints, waxes, and other coatings on flat metal, plastic, wood, laminate, concrete and stone surfaces.

The BOT-3000E conforms to American National Standard B101.1, "Test Method for Measuring Wet SCOF of Common Hard-Surfaced Floor Materials". It also conforms to ANSI B101.3 and A137.1, which measure dynamic coefficient of friction (DCOF). It has been validated according to ASTM F2508-13 "Standard Practice for Validation, Calibration, and Certification of Walkway Tribometers Using Reference Surfaces." n.2 SBR test feet included

Technical specification:

Measurement velocity (DCOF): 20 cm/s \pm 5%

Measurement range: 0.01 to 1.00 DCOF

Measurement normal force: 22.4N \pm 2%

Contact patch: approx. 3 x 28 mm

Measurement system tolerance: 3%

DCOF measurement distance: 10 to 50cm, incremental by 5cm (displays 4" to 20")

Ramp angle: 9.6° maximum (declination)

Verification Mass: 1.36 Kg

Internal Memory: 1000 measurements

Test data storage/transfer: USB flash drive, 8MB max.

Transferred file formats: PDF, TXT/CSV (.LOG files)

Printer: Thermal, 48 mm wide, 8 dots/mm

Sampling rate: 1000 samples/sec

Protection class: IP20

Power source: RSI battery pack (NiMH battery, 12V nominal, 3.8Ah)

Battery charger: 120-240VAC 50/60 Hz input.

Device dimensions: 29 x 20 x 17cm

Weight: 6.8 Kg

Spares and accessories: -SBR test foot - Leather test foot -Pack of 3 paper rolls for printer



Product Code:01CI5100/1

PENDULUM SKID TESTER

Instrument for the determination of the frictional resistance. The Pendulum is based on the Izod principle: a pendulum consisting 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.

Standards: BS 812 Pt. 114

BS EN 1097-8 Determination of Polished Stone Value

AS/NZS 4586:1999 Slip resistance classification of new pedestrian surface materials

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

BS 7976 Method of operation and calibration of the pendulum tester.

EN 1436 : 1997 Road Marking Materials

BS EN 13036-4:2003 Road and Airfield surface characteristics

Supplied complete with: n.1 Slider pad with 3" (4S) Four-S rubber (floor and natural stones test) with conformity certificate, aluminium carrying case.

Packing Dimensions: 70 x 70 x 30 cm

Weight: 30 Kg



Product Code: 01CI5000

Accessories and spare parts:

3" TLR Slider pad (road test) with conformity certificate

Spare 3" (4S) Four-S rubber slider pad with conformity certificate

SLIPPERINESS METERING PLATFORM SR/45 MODEL

To determine the dynamic critical angle in conformity with DIN-51130 (R Value) and DIN-51097 standards. The equipment is manufactured in accordance to DIN 51130 and DIN 51097.

It mainly consists of an aluminium framework with one stainless steel platform with adjustable angle to accommodate the sample panel.

The operator, wearing a safety belt, walks back and forth on the platform while this is getting inclined at the rate of 1° per second. The movement is stopped by the operator on the critical angle of slipperiness.

The test will be repeated several times near to the angle found to be critical, in order to get a more precise value that it will be confirmed and stored through the key placed on the hanging pushbutton.

Advantages: Easy to use by acquiring the critical angle value through a dedicated button.

Automatic calculations of the average values and results and storing of the results.

Storing of the operator characteristics.

Possibility to calibrate the inclination of the platform using one electronic level.

Possibility to print the data or to send the data to a PC.

Technical specification:

Movement with electromechanical actuator.

Hanging pushbutton to move the platform and acceptance of the value of the critical angle

Control panel with touch screen display.

Storing 10 individual results

Storing results (test reports)

Storing 10 operator characteristics

Angle executable platform : 0÷42°.

Speed: 1° per sec.- Inclination to impulse: 0,5 +/- 0,1° to impulse

Inclination sensor with resolution 0.1°

Accuracy: ± 0,1°

Mechanical rigidity (angle alteration): max +/- 0,2°

Test panel dimension: max 1200 x 600 mm

Flowing system of the test fluid according to the DIN51097 standards complete with reservoir, pump, collector with spray nozzles and fluximeter with regulating valve-

Serial exit for PC or printer.

Power supply: 200÷240 V - 50/60 Hz single phase - Power 0.7 kW

Overall dimensions: 2920 x 1250 x 3530(h) mm

Unladen weight: 270 kg.

Supplied complete with: Safety belt, Rope for harness and snap-hooks, Stepladder to access to the platform.

Accessories: -Set calibration board panel DIN 51130 -Shoes according to DIN 51130 -Set calibration board panel DIN 51097 -Serial printer

-Electronic level (useable for calibration)

-Calibration certificate for digital level



Product Code:01CI5200