

# **BDI** **SOLUTIONS**

## **Promotional Document**

For

## **EXL** Friction Tester



*'the ultimate safety engineering tool'*

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## ***The EXL Deck Tester***

The **EXL** is the ultimate safety engineering tool to help you select more slip-resistant surfaces. It is self-powered by a miniature CO<sub>2</sub> cylinder, the **EXL** can be used on a variety of surfaces including work areas, decks, gangways, accommodation areas and stairs fitting into places where larger machines cannot go.

Weighing less than 2 kilos, it is supplied with a hard carry case which can be carried as hand baggage.

We constantly work to make sure the **EXL** meets the demands of industry, with updates in the Testing Protocol and changes at Calibration Testing, so it can continue to meet the demands of the environment it is being used in.

### **Other advantages include;**

- The force applied is constant. Once the working pressure is set, both force and velocity remain the same at all angles of inclination.
- The vertical and horizontal force is applied in one action avoiding sticktion, something other testers suffer from.
- At the recommended operating pressure of 25 psi, the velocity of test shoe contact is about 28 cm per second.
- The test foot contacts the surface “heel” first, and the universal “ankle” joint allows it to pivot down flat onto the surface. This action manipulates the hydrodynamic squeeze film on the interface in a repeatable manner.
- The universal foot can flex freely in any direction, facilitating testing on uneven surfaces found on decks.

### **Unique advantages**

- Direct reading no calculations required
- Use on Wet and Oily surfaces with realistic results
- Completely self contained
- Being independent of gravity, it can be used on ramps without recalibration

### **Other Uses**

The standard Neolite foot should always be used when metering surface traction, but should the need arise, it can be easily removed to permit testing the traction performance of other materials, such as work boots on other areas of the facility.

## Operating the EXL

After preparing the test foot and charging the pressure system the **EXL** is ready to operate. Place the instrument down on the deck and select a mast angle by turning the black hand wheel near the centre of the chassis, with wet testing rewet after each actuation of the test foot.



*ReWet the test area after each test.*

## Testing and Recording Protocol

It has been traditional practice to test each surface orthogonally. That is, to take five successive readings in the north, east, south, west orientations and centre, then record the results. For each set of readings, the results are normally averaged to obtain a net result for that panel. Each number recorded is an actual traction measurement result and each one should be considered.

The Testing Protocol supplied with the machine provides a generic deck plan that can be used with all testing, it lists a minimum amount of areas over the deck for testing, however this minimum amount should be increased given unique aspects of a particular deck, such as damage, contamination etc.

## Full Package

The **EXL** is not fragile when used and transported in the recommended manner, it comes as a complete kit, carry case, sanding block, dust brush, water bottle and thorough documentation. It is fully prepared for use and tested before shipment, supplied with a 12 month Calibration Certificate and current Testing Protocol.

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