

# Mattress Rollator & Durability Tester

(MRDT)

Model: M0015

*a measurable difference...*

**IDM**<sup>®</sup>  
instruments

There are several different methods used in the mattress industry for the evaluation of innerspring and box spring mattresses. The Cornell Type Tester is used to test for firmness and firmness retention, the Mattress Rollator is used to test for durability and the Bedding Impact Tester is used to assess the effect of impact.

The MRDT has been designed to determine the durability of any type of Boxspring, Innerspring, Latex or Polyurethane mattress, by simulating long-term use conditions.

## Features:

- Electronic Counter and Totalizer
- Solid Construction
- Light Curtain Safety Enclosure
- Simple Stroke Setting

The M0015 has eliminated the need for a large moving cross beam, providing a safer, smaller work area with less moving hazards. Operation height is lower, minimizing lifting of mattresses and making it easier for loading and un-loading. The roller traverses from side to side across the mattress simulating a realistic sleeping action. Adjustable travel limits are fitted to allow for easy setup for different mattress sizes.

Also available is the option of having the Mattress Compression Testing feature, saving on space and the need to remove the samples as they can be tested for firmness in the same machine. With the added fixture, all Foam ILD & IFD and spring compression tests can be performed to international standards.

The Mattress Rollator consists of a weighted roller which moves width ways across a test mattress to simulate body movement. The length of stroke to which the Roller moves is very easily adjusted, by sliding the stroke adjusters left or right, to suit the relevant mattress under test. Unloading and loading of the Roller onto the test mattress is done easily via a motor driven lifting assembly.

## Applications:

- Boxspring Mattresses
- Innerspring Mattresses
- Polyurethane Mattresses





A Light Curtain Safety Enclosure is used with the Mattress Rollator to ensure no harm comes to the operator or others in the testing area. The Light Curtain Safety Enclosure together with the Mirror Reflectors ensures optimum safety in that as soon as foreign objects obstruct the Light Curtain, the Mattress Rollator will stop operating.

A Carrier Frame has been constructed to suit all sized mattresses, and should be placed in such a way that the Roller rolls from side to side and in the centre of the mattress.

This Roller movement should then simulate a realistic sleeper action. Adjustable end stops are fitted across the side of the mattress to hold the mattress during testing.

The Control Panel is the operation centre of the Mattress Rollator. As the Mattress Rollator performs the one basic movement repetitively, the Control Panel needs only limited controls to enable the operator to perform test cycles.

## Available Options:

- Round Roller – 140kg
- 6 Sided Roller – 109kg
- 8 Sided Roller
- Cleats
- Compression Testing Feature



**6 Sided Roller**



**Rounded Roller**

The 6-Sided Roller is made from coated plywood sections, and each section has the option of additional cleats. The cleats are attached via a nut and bolt so the internal section of the Roller will need to be accessed.

The Round Roller is also made of coated plywood sections, with a diameter of 250mm  $\pm$  1mm at the ends and 300mm  $\pm$  1mm in the middle. It is capable of following the surface of the mattress, and is free to move up and down to follow the mattress surface.



## Standards:

- ASTM F1566
- American Innerspring Manufacturers
- ASTM F1566
- ASTM D3574 -- Test B
- ISO 3386:1984
- ISO 2439
- BS EN 1957:2000
- GB 10807
- JIS K 6400
- AS 2281
- AS 2282.8

## Benefits:

- Easy to use
- Fast results
- Accurate

## Dimensions:

- **H:** 2,500mm
- **W:** 3,000mm
- **D:** 2,200mm
- **Weight:** 1,000kg

## Connections:

- **Electrical:** 415-480VAC @ 50/60 HZ 3 Phase

