INCLINE IMPACT TESTING

Packages in the distribution environment experience sudden side impacts caused by unpredictable motion while in transit. To ensure the safety of your package the L.A.B Incline Impact Tester can assist in determining the overall durability of your package or product by impacting all four sides on a 10 degree incline surface.

DROP WITH CONFIDENCE

L.A.B. Equipment's line of Inline Impact Testers are used to simulate the hazards encountered by packages in the distribution environment: rough handling, pallet marshalling, rail car switching or loading maneuvers. Our drop testers provide accurate, repeatable, and dependable results.

INCLINE IMPACT FEATURES

- Efficient Positioning Mechanisms
  - It’s simple to position the dollies to obtain the desired impact velocities. Various models have pneumatic, hydraulic or electric mechanisms, which position the angle of the rail assembly.

- Easy Load Dolly
  - For ease of loading and unloading, many L.A.B. models have features which allow dollies to be loaded with rail assembly in a level position close to the floor.

- Rigid Backstops and Barriers
  - Backstops and barriers provide rigid, unyielding impact surfaces to ensure that impact forces are applied uniformly to the test specimen. A massive steel framework faced with Group 4 woods or steel serves as a realistic impact surface.

- Fully Assembled
  - L.A.B. completely assembles and tests each machine at our factory to insure trouble-free installation and startup and customer site. Installation requires anchoring the machine to the floor, providing ballast (on some models) and connecting power utilities.

- Complies with ISTA, ASTM, ISO, and other internationally and industry recognized standards
additional options >

1000 VM - VELOCITY METER

- Meets ISTA test procedures
- Product velocity can be displayed in either English or Metric Units.
- Optical gate system measures velocity of moving objects such as shock machine carriages, horizontal and incline impact testers, cushion testers, etc.
- System consists of digital readout timing device, optical gate and trigger blade.
- Special mounting bracket design specific to each application.

TEST LAB PROFESSIONAL

- Professional grade data acquisition and analysis system
- Up to 4 channels
- Automatic sampling rate
- Minimum pulse duration capture is 0.1 ms
- Automatic or manual triggering
- Low pass data filtering
- 16 bit A/D
- Multi-tool data manipulation

INCLINE IMPACT SERIES MODEL COMPARISON

<table>
<thead>
<tr>
<th>Machine Type</th>
<th>I11000</th>
<th>I12000</th>
<th>I14000</th>
<th>I16000</th>
<th>I18000</th>
<th>I110000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payload Capacity</td>
<td>1000 lbs</td>
<td>2000 lbs</td>
<td>4000 lbs</td>
<td>6000 lbs</td>
<td>8000 lbs</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Impact Face</td>
<td>60 in x 60 in</td>
<td>72 in x 72 in</td>
<td>84 in - 84 in</td>
<td>84 in - 84 in</td>
<td>84 in - 84 in</td>
<td>96 in - 96 in</td>
</tr>
<tr>
<td>Dolly Surface Area</td>
<td>48 in x 48 in</td>
<td>60 in x 60 in</td>
<td>72 in x 72 in</td>
<td>72 in x 72 in</td>
<td>72 in x 72 in</td>
<td>84 in - 84 in</td>
</tr>
<tr>
<td>Impact Velocity</td>
<td>8 ft/sec</td>
<td>8 ft/sec</td>
<td>8 ft/sec</td>
<td>8 ft/sec</td>
<td>8 ft/sec</td>
<td>8 ft/sec</td>
</tr>
<tr>
<td>Free Fall Height</td>
<td>18 in</td>
<td>18 in</td>
<td>18 in</td>
<td>18 in</td>
<td>18 in</td>
<td>18 in</td>
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MODEL 1000VM
VELOCITY MONITOR

For ultimate accuracy in incline impact testing and in a variety of other situations

Augments the incline impact tester with direct measurement and display of velocity
Minimizes setup and maintenance time
Easy to read digital display set for km/h, m/sec, mph, or ft/sec
Unit can be integrated with existing incline impact tester
Required for ASTM and ISTA specification compliance
Unit can be mounted on the incline impact tester or remain separate

Performance…
The 1000VM Velocity Monitor combines state of the art digital circuitry with simple button operation. It performs velocity measurement of the inclined impact dolly quickly and easily by only requiring one input for calculation. The measurements obtained from the 1000VM are required for ASTM and ISTA compliance.

Precision…
The 1000VM has been factory set and calibrated at L. A. B. Equipment, Inc. This unit provides a single display of velocity measurement and has an easy reset feature. L. A. B. has built highly accurate state of the art technology into a unit that even the most novice can operate.

Accuracy…
By using one pulse for a velocity calculation, versus the continuous pulse train required by some other systems, there is an accurate reading every time—even with changing frequencies. The Internal Circuitry performs the calculation by first measuring the elapsed time of one cycle. Time is then inverted to produce a frequency, which is converted by a factory set multiplier to accurately reflect velocity.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy:</td>
<td>1.00Hz to 100.00Hz, +/- .1% @ 25°C.</td>
</tr>
<tr>
<td>Display:</td>
<td>4 digits of .56” high efficiency red LED.</td>
</tr>
<tr>
<td>TTL count input:</td>
<td>Schmitt trigger type with no limit on rise or 100Hz.</td>
</tr>
<tr>
<td>Input Power:</td>
<td>115 or 220 VAC, 50 or 60 Hz</td>
</tr>
<tr>
<td>Power Line Fuse:</td>
<td>1/8 Amp</td>
</tr>
<tr>
<td>Sensor Current Draw</td>
<td>Emitter: 20mA maximum. Detector: 20mA maximum.</td>
</tr>
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