# Solutions

### Squeezer Compression Test System

The Squeezer provides the most accurate means of determining top-to-bottom compression strength of packages. This system is specifically designed to quantify box performance so that the effect of various board mediums, closures and interior partitions can be factually compared by means of "Load Sharing" analysis. Production line variations can be easily benchmarked against design standards. The Squeezer is easy to operate because standard test routines are fully automated.

Lansmont compression testers are thoroughly calibrated and documented in accordance with ASTM E4 standards. They fully satisfy test protocol defined in ISTA, ASTM D642, D4169, D4577; TAPPI T804, Federal 101, NMFC Item 180, DOT Rule 181, UN Orange Book, ISO 2872 and ISO 874.

#### **Squeezer Features:**

- Touchscreen user interface eliminates operator keyboard errors.
- Automated constant rate and constant load routines for standard industry test protocols ensure test repeatability.
- Completely self-contained design eliminates cable and hose entanglements.
- Real-time display of test data: force, deflection, temperature, humidity, and peak values gives operator exact status.
- Serial port enables easy data export to SPC or other database systems for integration with other test attributes.
- Worldwide Customer Service department.

#### **Compression Testing Benefits:**

- Verify theoretical top-to-bottom compression strength
- Monitor production line or vendor quality
- Compare package design options
- Simulate distribution cycle hazards: warehouse stacking, vehicle stacking









## Squeezer Compression Test System

## TECHNICAL SPECIFICATIONS

| PHYSICAL             |   |  |
|----------------------|---|--|
| Maximum Force        | 5,000 lbs (2,268 kg)  |  |
| Platen Size          | 30 x 30 in. (76 x 76 cm)                                      |  |
| Maximum Load Opening | 48.5 in. (123.2 cm)   |  |
| Upper Platen Style   | Fixed   |  |
| Drive System         | Electric motor with ball screws and self lubricating bearings |  |
| Calibration          | In accordance with ASTM E4                                    |  |
|                      |   |  |
| SYSTEM PRECISION     |   |  |
| Force:               |   |  |
| Туре                 | Balanced Temperature  |  |
|                      | Compensated Load Cell   |  |
| Accuracy             | Better than 1% of Reading                                     |  |
| Resolution           |   |  |
| <312.5 lbs.          | 0.076 lbs. (0.3 kN)   |  |
| 312.5 to 625 lbs.    | 0.153 lbs. (0.7 kN)   |  |
| 625 to 1,250 lbs.    | 0.305 lbs. (1.4 kN)   |  |
| 1,250 to 2,500 lbs.  | 0.610 lbs. (2.7 kN)   |  |
| 2,500 to 5,000 lbs.  | 1.220 lbs. (5.4 kN)   |  |
| Displacement:        |   |  |
| Туре                 | Digital Rotary Encoder  |  |
| Accuracy             | 0.002 in. (.05 mm)  |  |
| Resolution           | 0.00025 in. (.006 mm)   |  |
| Temperature:         |   |  |
| Accuracy             | +/- 0.36 degrees F (+/- 0.2 degrees C)                        |  |
| Range                | -4 to 176 degrees F (-20 to 80 degrees C)                     |  |
| Humidity:            |   |  |
| Accuracy             | +/- 3% RH   |  |
| Range                | 0 to 100%   |  |
|                      |   |  |
| PLATEN SPEED         |   |  |
| Platen Speed:        |   |  |
| Test                 | 0.1 to 0.51 in. per minute (0.25 to 1.30 cm/min)              |  |
| Positioning          | 0.1 to 27.6 in. per minute (0.25 to 70.1 cm/min)              |  |
|                      |   |  |
| CONTROL              |   |  |

LCD Touchscreen recessed in base of test machine

| CONTROL MODES      |   |  |
|--------------------|---|--|
| Constant Rate Test | Auto Home, Pre-load, Yield, Stop Force, Tare,<br>Up/Down, Auto Open, Start/Stop, Graph, Peak<br>Hold, Export  |  |
| Constant Load Test | Force Level, Test Duration, Auto Home, Pre-load,<br>Yield, Creep, Auto Tare, Up/Down, Auto Open,<br>Start/Stop, Graph, Export   |  |
| Utilities          | Time, Date, metric/English, Units,<br>Test Speed, Password Administration, Display<br>contrast  |  |
| Calibration        | ASTM E4 calibration table, Sensor calibration parameters  |  |
| Data output        | Serial Port   |  |
|                    |   |  |
| SAFETY PROVISIONS  |   |  |
| Safety Provisions  | * EPO emergency stop button, platen over-<br>travel, platen lock detector, 24 volt control<br>voltage   |  |
|                    | CE Compliant  |  |
|                    |   |  |
| OPTIONS            |   |  |
| Options            | * Small Test Stand 30 in. Tall x 42.5 in. Wide x 30 in. Deep (76.2 cm x 108 cm x 76.2 cm)  * Large Test Stand 30 in. Tall x 72.5 in. Wide x 30 in. Deep (76.2 cm x 184 cm x 76.2 cm)  * Temperature & Humidity Sensor |  |
| OVERALL DIMENSIONS |   |  |
| Without Stand      | 67.0 in. tall (170.2 cm tall)<br>42.5 in. wide (107.9 cm wide)<br>36.6 in. deep (92.9 cm deep)  |  |
| With Small Stand   | 95.5 in. tall (242.6 cm tall)<br>42.5 in. wide (107.9 cm wide)<br>36.6 in. deep (92.9 cm deep)  |  |
| With Large Stand   | 95.5 in. tall (242.6 cm tall)<br>72.5 in. wide (184 cm wide)<br>30.0 in. deep (76.2 cm deep)  |  |
|                    |   |  |
| APPROXIMATE WEIGHT |   |  |
| Without Stand      | 725 lbs. (329 kg)   |  |
| With Stand         | 1,000 lbs. (454 kg)   |  |



110 VAC, 10 Amps, 60 Hz or 220 VAC, 5 Amps, 50 Hz

**Electric Power Requirements**