



# Mechanical Shakers



MS-400 with Tall Fence



MS-2000 with Low Fence

Packaged-products must withstand vibration and impact dynamic energy while being transported. Mechanical shakers are a low cost testing equipment option for challenging the integrity of your packaging designs. Lansmont Mechanical Shakers comply with repetitive shock requirements as referenced in industry standard testing specifications including ASTM, ISTA, ISO, and MIL-STD.

## PERFORMANCE SPECIFICATIONS

	MS-400	MS-2000	
<b>Test Bed Size</b>	48 in. square (122 cm square)	60 in. square (152 cm square)	84 in. square (213 cm square)
<b>Option Fence Size (L x H)</b>	36 in. (91 cm) on one side	48 in. (122 cm) on one side	48 in. (122 cm) on one side
<b>Payload Capacity</b>	400 lb. (181 kg)	2,000 lb. (909 kg)	2,000 lb. (909 kg)
<b>Frequency Range</b>	2.0 – 5.0 Hz	2.3 - 4.7 Hz (2.0 – 5.0 Hz programmable)	2.3 - 4.7 Hz (2.0 – 5.0 Hz programmable)
<b>Motion</b>	circular-synchronous, vertical-linear, 30° out-of-phase (optional)	circular-synchronous, vertical-linear, 30° out-of-phase (optional)	circular-synchronous, vertical-linear, 30° out-of-phase (optional)
<b>Maximum Acceleration</b>	1.25 g	1.25 g	1.25 g
<b>Displacement</b>	1 in. (2.54 cm) fixed	1 in. (2.54 cm) fixed	1 in. (2.54 cm) fixed



# Mechanical Shakers

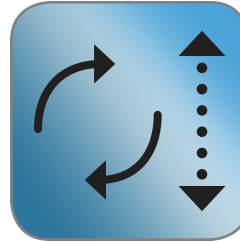


## FEATURES



### Handheld Controller:

The handheld controller is a lightweight, ergonomic control box designed for hand-held operation. All control features of the MS-400 and MS-2000 Package Shakers are incorporated into the design including Power On/Off, test setup, and Start/Stop functions. An LCD screen displays all pertinent test information—rotary speed, frequency, test durations, and acceleration level.



### Circular-Synchronous and Vertical-Linear Motion:

Standard Package Shaker systems are configured to perform either circular-synchronous (rotary) and vertical-linear (vertical only)



### Variable-Speed DC Motor and Synchronous Belt Drive:

Package Shakers come standard with a variable-speed DC motor, driving a synchronous belt, which provides quiet, smooth operation of the test system.

## OPTIONS



### Integrated Safety Interlocks:

Allows for operators to use optional safety systems, such as pressure sensitive safety mats or photocell light curtains, which disable the test system when triggered. A positive lockout safety pin also prevents the carriage from moving when inserted.

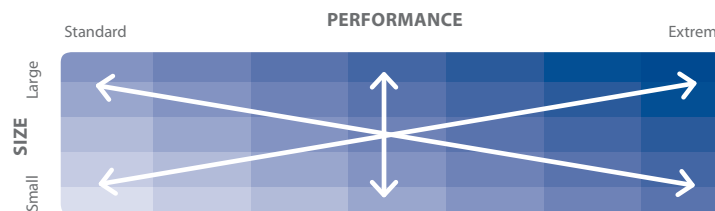


### Tall Fence:

Package Shakers configured with a hi-end fence allows both for containment of test items on test bed, as well as an impacting surface when performing circular-synchronous or out-of-phase testing.

## MADE TO ORDER

Not quite the equipment size or performance level that you need? If we do not already manufacture the test machine ideally suited for your company's testing applications, our engineering team can custom design a test system specific to your needs.





# Mechanical Shakers



## SPECIFICATIONS

### PHYSICAL

	MS-400	MS-2000	
Table Sizes	48 in. square (122 cm square)	60 in. square (152 cm square)	84 in. square (213 cm square)
Displacement	1.0 in. (2.54 cm) fixed	1.0 in. (2.54 cm) fixed	1.0 in. (2.54 cm) fixed
Frequency Range	2.0 – 5.0 Hz	2.3 - 4.7 Hz	2.3 - 4.7 Hz
Max. Acceleration	1.25 g Peak	1.25 g Peak	1.25 g Peak
Motions	Circular-Synchronous, Vertical-Linear, 30° out-of-phase	Circular-Synchronous, Vertical-Linear, 30° out-of-phase	Circular-Synchronous, Vertical-Linear, 30° out-of-phase
Machine Envelope	54 in. x 60 in. (137.2 cm x 152.4 cm)	66 in. x 72 in. (168 cm x 183 cm)	90 in. x 96 in. (229 cm x 244 cm)
Machine Capacity	400 lbs. (181 kg)	2000 lbs. (907 kg)	2000 lbs. (907 kg)

### CRATE INFORMATION

	MS-400	MS-2000	MS-2000
Dimensions	48 in. table (122 cm) 72"L x 62"W x 61"H 183 L x 157 W x 155 H cm	60 in. table (152 cm) 84" x 75"W x 96"H 213 L x 191 W x 244 H cm	84 in. table (213 cm) 105"L x 95"W x 96"H 267 L x 241 W x 244 H cm
Gross (shipping) weight	1300 lbs. (590 kg)	2550 lbs. (1157 kg)	3000 lbs. (1361 kg)
Net weight	800 lbs. (363 kg)	1950 lbs. (885 kg)	2100 lbs. (953 kg)

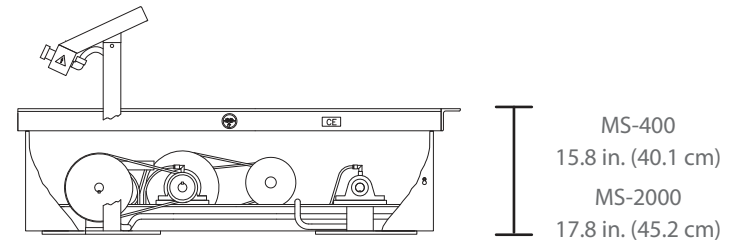
### UTILITIES

#### Power -

	MS-400	MS-2000
Voltage	240 VAC +/- 10%	240 VAC +/- 10%
Frequency	50 Hz – 60 Hz	50 Hz – 60 Hz
Phase	Single Phase	Single Phase
Current	20A	25A

## SYSTEM DRAWINGS – STANDARD CONFIGURATION

### SIDE VIEW



### TOP VIEW

