

# SHOCK MACHINE

## Multi-Drop Shock Testing System

MDST-300, 500, 700, 900, 1100, 1500, 2000

MDST has a unique characteristic, called the “Multi-shock pulse generator” to apply multi shock test conditions via a single programmer. With that characteristic and a wide range of table sizes, this tester can be used for various specimens.

### Features

- Multi test-conditions application
- High Reproducibility
- Easy Maintenance for Long Term Usage
- No-brainer Tester to operate
- Easy Setting with Simple Construction
- Set-up by Double-Layered Shock Absorber

### Compliance Standard

- JIS C 60068-2-27
- MIL-STD-810E
- IEC 60068-2-27
- JIS Z0202, ASTM D5487( with optional programmer)

### Specification

Model	MDST-300	MDST-500	MDST-700	MDST-900	MDST-1100	MDST-1500	MDST-2000
Table size (W × D mm)	300 × 300	500 × 500	700 × 700	920 × 920	1150 × 1150	1500 × 1500	2000 × 2000
Specimen max weight (kg)	50	80	100	200	350	500	500
Shock pulse	Half-sine						
Acceleration range (m/s <sup>2</sup> )	100 ~ 3000 (10 ~ 300G)				100 ~ 2700 (10 ~ 270G)		100 ~ 2000 (10 ~ 200G)
Pulse duration range (ms)	4 ~ 25						
Size (W × D × H mm)	1100×640×2400	1300 × 700 × 2500	1600 × 900 × 2950	1800 × 1150 × 3300	2200 × 1300 × 3100	2500 × 1650 × 4055	3000 × 2300 × 3690
Capacity (kg)	1000	2600	4200	5200	9000	19100	32000
Controller size (W × D × H mm)	520 × 500 × 950						
Power supply (Voltage)	AC200V, 3-phasese, 10A		AC200V, 3-phasese, 20A		AC200V, 3-phasese, 30A		AC200V, 3-phasese, 40A
Power supply (Current consumption)	10A		20A		30A		40A

\* (Available for customization) The above are standard specifications. Please contact us if you have any request to customize.



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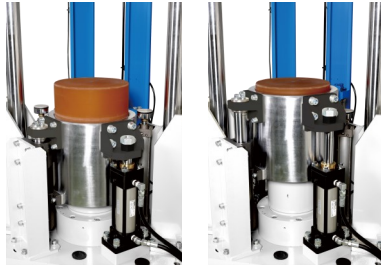
# MDST series



# Option for SHOCK MACHINE ( ASQ / MDST / SDST )

## Automatic System of "rubber-height changeable device" (ASQ/MDST only)

This system makes it possible to apply wide range test conditions by controlling the height of rubber automatically. Although this system is usually a manual changeable system, the automatic system can be selected upon request. This system will assist in conducting the shock test stress-freely.



## "low-impulse generator" System

To apply low acceleration, this system controls drop speed of drop table by making it slower. It generates lower acceleration which can hardly be applied by standard models.

## High speed lifting system

By implementing the high speed lifting system via wire and electromagnet, the test cycle becomes almost twice quicker than the standard model. For large amounts of continuous test, this contributes to shortening the time to test effectively.

## Customizable table size

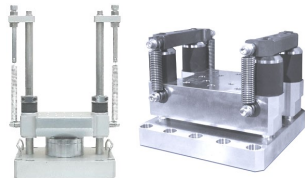
For various specimen sizes, we can customize the table to a larger size while taking into consideration the whole balance. Our record for the maximum size is 2000×2000mm.

## Specialized Programmer for Drop Test of Packaging

Short duration programmer with less than 3msec is selectable optionally. The equivalent drop test for packaging, based on ASTM D5487, via the shock machine can be conducted using this programmer.

## Shock Amplifier, HGP series

This device can generate the high amplitude shock pulse by collaborating with the shock machine. There are 2 type of amplifier, HGP-20 up to 5,000G with 0.2ms duration, and HGP-120 up to 30,000G with 0.1ms.

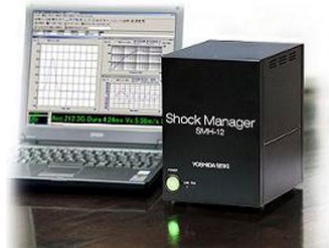


HGP-20

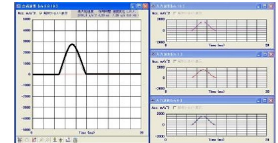
HGP-150

## Shock Manager SM-500

It can contribute to the measurement and analysis of shock test. It is able to incorporate a max of 10 channels of accelerometers\* and assist in monitoring its test result. With useful functions like SR and SRS analysis, it can analyze various specimens.



- User-Friendly Operation
- Multi analyzing functions



\*10 channels for only the piezoelectric or build-in amplifier type  
5 channels each for the piezoelectric and build-in amplifier type (Total 10 channels)

## Safety Installations

The test should be carried out not only correctly, but also safely. These installations contribute in assuring its safety.

- Safety Fence (soundproofing)

To lower external noise levels and prevents injuries during tests. It covers the whole tester. When the door is closed, those risks would be reduced.



Safety Fence

- Signal Light

Its color changes corresponding to the action at that point of time. These changes can announce the situation of tester to whoever is around the tester.

- Safety Mat Switch

This mat surrounds the tester and stops the movement when anything is on it.

Its size and quantity can be arrange as per required.

- Photoelectric Sensor

It detects anything that cuts off its photoelectric range. These sensors need minimal space to install and keeps high sensitivity.

\*Available to apply either requirement.



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