

15th June 2018

Product Launch of New Style Shock Testing System “ PDST Series ”

SHINYEI TESTING MACHINERY CO.,LTD. is proud to present our new generation shock testing system, PDST Series as shown in Fig.1.

This series has been developed to conduct shock tests for small sizes of electronic devices and has unique distinguishing function with the shock table being pulled down forcibly by mechanical spring. Therefore, extreme shock pulses can be generated on the shock table even though the drop height is low. Also, it is downsized by around 50% in comparison with our conventional models. Although it is the compact size, range of shock tests being almost equal to our conventional models can be provided. In addition, the multi-shock generator, our own unique technology, that can generate various shock durations with one single cushioning programmer is equipped. It is very helpful in conducting shock tests effectively and conveniently by utilizing this unique function.

We are planning to distribute this series into the market worldwide and believe that it will contribute to the safety and high reliability of electronic devices all over the world.



Fig.1 PDST230

<Product Specification>

Product	Pull-down Drop Shock Tester	
Model	PDST-230M	PDST-230S
Mass of Specimen	Up to 20kg	
Shock pulse	Half-sine	
Shock range	50-800G	150-2300G
	Up to 30,000G by HGP-150 with optional amplifier	
Duration range	2.5-20ms	0.5/1/3 ms
Velocity change range	Up to 15m/s	
Multi-shock pulse generator	Available	N/A
Base	Pneumatic springs and hydraulic damper device	
Breaking system	Pneumatic-hydraulic brake system	
Test mode	Single shot / Multi-shot mode	
Controller	Touch-panel controller	
Size	W650 × D800 × H1800mm	
Weight	1500kg	
Power supply	100~240VAC、 50/60Hz	
Air supply	over 0.8MPa and 350dm ³	
Option	<ul style="list-style-type: none"> ▪ Shock measurement instrument, SM500 ▪ Dual-shock amplifier, HGP-150 	

<For Enquiries and Quotation Please Contact>

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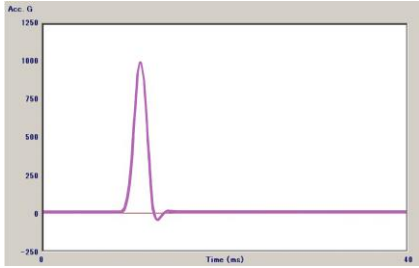
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URL : <http://www.shinyei-tm.com/contact.html>

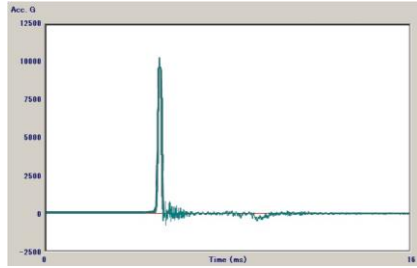
Advantages of PDST

Accurate Shock Pulse

Shock pulse generated by PDST is always clear and noiseless with high repeatability of up to $294,000\text{m/s}^2$ (30000G) with the optional dual shock amplifier, HGP-150.



$9,800\text{m/s}^2(1,000\text{G})@2.5\text{ms}$



$98,000\text{m/s}^2(10,000\text{G})@0.2\text{ms}$



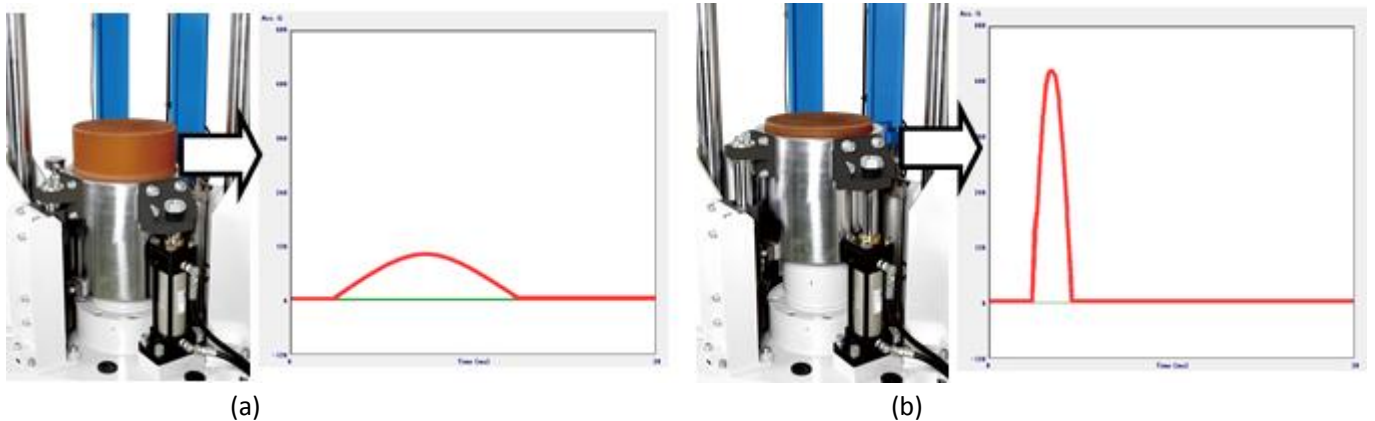
Dual shock amplifier HGP-150

Built in Multi-Shock Generator

Multi-shock generator (MSG, with the figures shown below), technology unique to us, for shock tests, is built into the PDST-230M.

In general shock testing system, the duration of shock pulse corresponds to the hardness of the shock programmer. This means the programmer needs to be changed if you require different duration of the shock pulse.

The MSG has been developed to reduce such waste of time and adopted to the shock testing systems model ASQ and MDST series. It is a mechanical based function of the shock testing system that can make the displacement of the shock programmer easy by only changing the height of the metal ring. Therefore, shock duration of the shock pulse generated by the MSG is variable between short and long ones only with the use of one single shock programmer. This will contribute to the efficiency of conducting shock tests and provide relatively stress-free solution for the testing engineers.



Relationship between the generated shock pulse and condition of multi-shock generator(MSG)
(a) MSG condition for a long duration shock pulse, (b) MSG condition for a short duration shock pulse

Compact Body

Although the PDST body size is very compact when comparing with our conventional shock testing system, its performance is almost identical to the conventional model because the PDST has unique function pulling down the shock table vertically and mechanically.

This series can be placed easily even in narrow spaces as its size and volume are almost 50% of our conventional shock testing system.

