



**Spectral Dynamics, Inc.**  
**SD SB Series Pneumatic Shock and Bump Machine**

**Specification Table**

Specification	SD SB400	SD SB500	SD SB600	SD SB700	SD SB800	
<b>Parameters for Shock Testing</b>						
Mounting Table Size (mm X mm)	400X400	500X500	600X600	700X700	800X800	
Max Payload (kg)	50	100	200	300	500	
Shock Acce (g)	Half Sine	10-800	10-600	10-500	15-400	15-300
	Trapezoid	15-100				15-50
	Sawtooth	15-100				
Pulse Duration (ms)	Half Sine	1.5-40		2-40		3-40
	Trapezoid	6-25				
	Sawtooth	6-20				
Shock Distance (mm)	0-500		0-520		0-550	
Max Velocity Changing without Load (m/s)	10.5	9.6	9.0	8.8	8.2	
Max Velocity Changing with Load (m/s)	7.8	6.7	6.3	6.6	6.4	
<b>Parameters for Bump Testing</b>						
Wave Form	Half Sine					
Accelerometer (g)	2-200	3-150	3-120	3-100	4-80	
Pulse Duration (ms)	1.5-25	2-20	3-20		4-20	
Drop Distance (mm)	0-200				0-180	
Cycles per minute	0-120		0-100		0-80	
Max Velocity Changing without Load (m/s)	5.2	4.5	4.2	3.8	3.5	
Max Velocity Changing with Load (m/s)	4.5	3.7	3.4	3.2	3.0	
<b>Physical Size and Weight</b>						
Machine Weight (kg)	2450	2950	3800	4850	5900	
Machine Size LXDXH (mm)	750X700X1130	860X810X1250	1150X910X1080	1340X1000X1085	1540X1100X1180	
<b>Environment</b>						
Compressed Air Pressure (kg/cm <sup>2</sup> )	7-8					
Compressed Air Flow for Shock Only (m <sup>3</sup> /minute)	0.8		1.6			
Compressed Air Flow for Bump (m <sup>3</sup> /minute)	1.6	2.0		3.2 (A 3m <sup>3</sup> air tank is required.)		
Compress Air Tank required						
Power consumption (kVA)	Machine	2	2	2	2	
	Compressor	11	15	15	22	22
Temperature Range	0°C-40°C					
Humidity	≤90% (25°C) non-condensing					
<b>Control and Measurement</b>						
Simple Shock Only	ASK01 Touch Screen Controller					
Bump or Shock needing Measurement	MIS02 Pneumatic Shock Control and Measurement System					
<b>Compliant Standard</b>						
GB/T2423.5, GB/T2423.6, IEC68-2-29, JIG497-200, MILSTD-810, ISO.						

*All the features make the SD SB a reliable and affordable system for your applications.*

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