



EMERSON APPARATUS

SPECIFICATIONS

Model PSM 100 Pneumatic Shock Machine

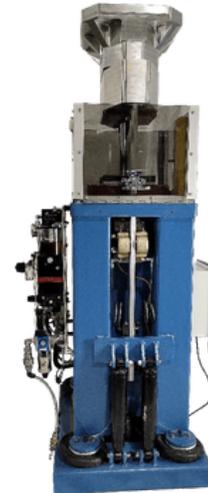


Table / Carriage Size	9 in x 9 in
Payload Capacity	100 lb
Maximum Specimen Height	Unlimited
Maximum Stroke	25 in
Cycling Rate	~15 shocks per minute (slower with air amplifier)
Velocity Change	420 in/sec (No Load)
	350 in/sec (50lb Load)
	260 in/sec (100lb Load)
Maximum Velocity (Air Amplifier)	Up to 600 in/sec
Shock Pulse Duration	3 ms min / 30 ms max
Lift Mechanism	Pneumatic
Brake System	Hydraulic, externally mounted
Shock Isolation	Impact loads isolated from floor; seismic foundation supplied
Overall Height	Less than 6 ft
Floor Space Required	~40 in x ~40 in
Machine Weight	~1,900 lb
Electrical Requirements	115V or 220V, 1-phase, 60 Hz
Pneumatic Supply	Plant air or bottled nitrogen, 80–120 psi

Models

Pneumatic Shock Machine	Table Options Working Surface in Inches X Inches							Power Requirements
Payload LBS	09 x 09	16 x 16	18 x 18	24 x 24	30 x 30	40 x 40	60 x 60	Control Power Min Air Requirement**
100	X	X*						110-220 VAC 90W 90 PSI @ 5CFM
500			X	X	X			110-220 VAC 90W 90 PSI @ 10CFM
1000			X	X	X	X*		110-220 VAC 90W 90 PSI @ 10CFM
2500						X	X*	110-220 VAC 90W 90 PSI @ 30CFM
Options								Notes
0404MTA	Bolt On	Bolt On	Bolt On	Bolt On	Bolt On	Bolt On	Bolt On	0.2ms-1.5ms up to 5000g Half-sine
0909MTA	Built In	Built In	Bolt On	0.5ms-3.0ms up to 2000g Half-sine				
VH Vertical Horizontal			X	X	X			Machine can be used in either mode
SW Square Wave			X	X	X	X	X	Not Available on PSM100
TSP Terminal Sawtooth Pulse	X	X	X	X	X	X	X	Achieved by impacting lead pellets

* Working Surface is achieved via Head Plate / Head Expander

** The cycling rate increases with more CFM