



©M/RAD Corporation
71 Pine Steet
Woburn, MA 01801
888-500-9578 • 781-935-5940
Fax: 781-933 -7210
www.mradcorp.com • inquiries@mradcorp.com

Shock Testing Equipment

Free Fall Shock Machine

The Free Fall Shock Machine is designed to produce classical shock wave shapes by dropping a table supported on its side by Thompson Rods and Bearings. The table drop height may be set at pre-determined heights for shock pulse repeatability. Acceleration levels are generated by drop height while time duration is a function of the programmer provided; elastomer pads for half-sine, lead pellets for sawtooth and pneumatic cylinders for square wave pulses. Accelerated fall machines using bungee cord are also available from M/RAD. Every machine is supplied with brakes to prevent repeated impacts and incorporate a massive steel reaction mass mounted on springs with dampers to isolate the shock from the floor.



3642-100 with bungee assist



0505-20

SPECIFICATIONS

Model No.	0505-20	1010-100	1919-250	2424-500	3232-1000	4949-2000
Table Size and Weight	5 in x 5 in 12 lbs	10 in x 10 in 25 lbs	19 in x 19 in 100 lbs	24 in x 24 in 150 lbs	32 in x 32 in 190 lbs	49 in x 49 in 650 lbs
Maximum Specimen Weight	20 lbs	100 lbs	250 lbs	500 lbs	1000 lbs	2000 lbs
Maximum Terminal Velocity	200 in/sec	200 in/sec	200 in/sec	200 in/sec	200 in/sec	200 in/sec
Maximum Drop Height	60 in	60 in	60 in	60 in	60 in	60 in
Minimum Pulse Duration	0.5 ms	1 ms	1.5 ms	3 ms	3 ms	4 ms
Height Above Floor	8 feet	10 feet	12 feet	13 feet	13 feet	14 feet
Lift Mechanism	Electric Winch	Electric Winch	Air Cylinder or Hydraulic Cylinder or Electric Winch	Air Cylinder or Hydraulic Cylinder or Electric Winch	Air Cylinder or Hydraulic Cylinder or Electric Winch	Air Cylinder or Hydraulic Cylinder or Electric Winch
Foundation	Seismic supplied with machine	Seismic supplied with machine	Seismic supplied with machine	Seismic supplied with machine	Seismic supplied with machine	Seismic supplied with machine
Floor Space	18 in x 18 in	28 in x 28 in	31 in x 31 in	36 in x 36 in	40 in x 40 in	73 in x 73 in
Utilities Required	Plant air or bottled nitrogen 80-120 psig 115V, Single Phase, 50 or 60 Hz	Plant air or bottled nitrogen 80-120 psig 115V, Single Phase, 50 or 60 Hz	Plant air or bottled nitrogen 80-120 psig 115V, Single Phase, 50 or 60 Hz	Plant air or bottled nitrogen 80-120 psig 115V, Single Phase, 50 or 60 Hz	Plant air or bottled nitrogen 80-120 psig 115V, Single Phase, 50 or 60 Hz	Plant air or bottled nitrogen 80-120 psig 115V, Single Phase, 50 or 60 Hz

Customer to specify desired bolt hole pattern

SPECIFICATIONS AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE