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## Package Test Equipment

### Transportation Shaker

M/RAD Transportation Simulators are excellent for the duplication of the destructive shock and vibrations incurred during product shipment. Minor package modifications can have major effects on damage protection of shipped goods. SAVE MONEY and pretest your package deign before bulk shipment commitments are made.



Model 3636(300)TS with Impact Wall



Model 6060(1250)TS with High Fence

Transportation Shakers are also excellent for burn-in testing to help eliminate premature product failure caused by packaging techniques. SAVE MONEY and burn-in your products prior to shipment.

M/RAD Transportation Shakers have been designed to meet all the parameters outlined in MIL-STD-810, ASTM STD D999, International Safe Transit Association (ISTA) Specification, Federal Test Method No. 101 and MIL-STD-3311

The M/RAD Transportation Shaker is supplied with a constant 1 inch double amplitude displacement. As frequency increases, the "g" level increases. Note that at 300 RPM, maximum "g" is 1.25. At this frequency and g level, the package will be bouncing a lot.

The laws of physics tell us that a package will begin to bounce at 1g. This will happen at around 265 RPM. Therefore, the customer will use the machine between 265-300 RPM. For those meeting ISTA requirements, the exact frequency shall be determined at the point where a 1/16 inch shim may be inserted 4 inches between the package and the table surface.

The Transportation Simulator must be hard mounted to the floor. The following parameters should be considered:

The floor should be reinforced concrete, minimum 4 inches thick.

The machine should be placed on a basement or ground level.

The machine IS NOT isolated and utilizes the floor as a reaction mass. Therefore, the machine should be placed away from vibration sensitive areas.

M/RAD will send a drawing of the machine tie down locations upon P.O., if required. It is recommended that the customer wait until he receives the machine and transfers the tie down holes directly to the floor. This is because the machine is a steel weldment and the tolerance for hole dimensions on the base frame are subject to large variance.

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**SPECIFICATIONS**

<b>MACHINE SIZE*</b>	<b>PAYLOAD CAPACITY</b>
24 in X 30 in	100 lbs
24 in X 30 in	250 lbs
36 in X 36 in	300 lbs
24 in X 42 in	500 lbs
60 in X 60 in	1250 lbs
60 in X 60 in	2500 lbs
72 in X 72 in	3500 lbs
72 in X 72 in	4500 lbs
72 in X 96 in	7500 lbs
72 in X 96 in	8500 lbs
96 in X 144 in	12000 lbs

\* Other sizes and payload available upon request

**FEATURES**

SPEED RANGE:	150-300 RPM
DISPLACEMENT:	1 inch Double Amplitude
ACCELERATION:	Maximum 1.25g
PAYLOAD:	50-12,000 pounds
MOTION:	Circular Synchronous
OTHER:	3 inch Side Rails
	Safety Covers
	Remote Speed Control

**OPTIONS**

MOTION:	MOTION: Vertical Linear
	Synchronous out-of-phase
	Non Synchronous
	30 degree out-of-phase
FENCE:	Impact Wall, 1 or 3 feet
	High Fence, 3 or 5 feet
ELECTRONICS:	Tachometer
	Timer
	Enclosure