



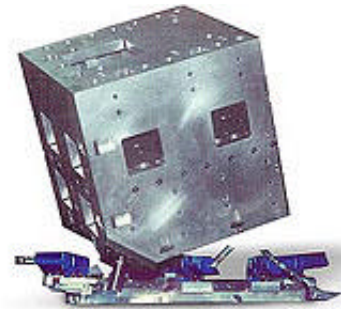
©M/RAD Corporation
71 Pine Steet
Woburn, MA 01801
888-500-9578 • 781-935-5000
Fax: 781-933 -7210
www.mradcorp.com • inquiries@mradcorp.com

Electrodynamic Shaker Peripheral Equipment

Shock and Vibration Fixtures

A Vibration Fixture is a device that typically interfaces the vibration shaker/shock machine and the test item(s). Its design may range from a very simple plate with a few attachment holes to an extremely complex device either designed specifically for a unique test item or designed with automatic features which allow production testing to occur with the rapid insertion and/or removal of the test item.

Often, for products which do not exhibit any unique mounting characteristics, a universal style fixture is appropriate. Fixtures of this type may be classified as Cube, L or T.

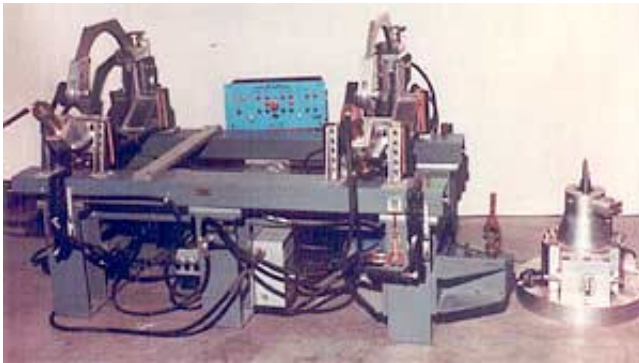


Automatic Rotating Cube Fixture

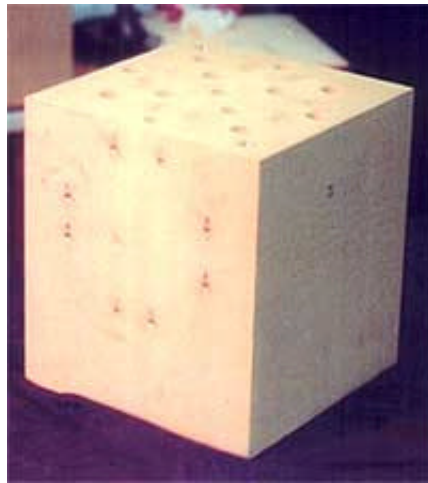
In the case of the cube fixture, there would be 5 faces available to mount test items as the bottom surface would be hard mounted to the test apparatus and not available to mount test item. If the condition of test is to vibrate in each of three mutually orthogonal axes, the cube lends itself as the perfect fixture. One may place product on the top surface as axis Z and on each of the sides for axes X and Y. It would only be required to rotate the test item in relation to each face of the cube to realize all the orthogonal axes. Assuming the test equipment could handle the resulting payload, the cube fixture is capable of testing up to 5 products at a time, thereby minimizing total test time.

For those with 6 axes requirements, a cube may be fabricated with a cavity on the top such that the UUT may be situated inside the cube while mounted on an adapter plate for the -Z axis.

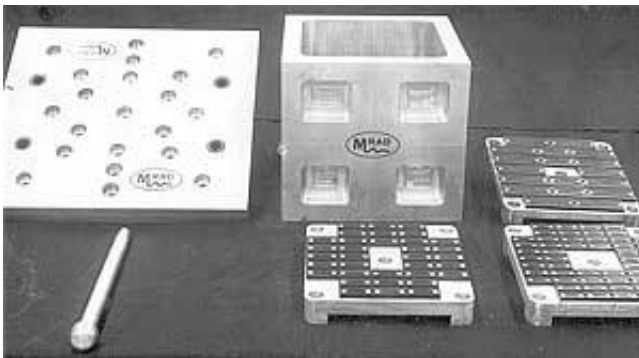
The L and T Fixtures are particularly useful in supplying a mounting surface perpendicular to the direction of the test apparatus. The product may be mounted directly to the apparatus for one orthogonal axis, but if for some technical reason, the product does not allow itself to be mounted on its side relative to the position of the apparatus, an L or T fixture would be appropriate. The product would be mounted on the vertical member of the L or T for the second axis and then rotated 90 degrees in order to perform the third axis. Note that the vertical member of the T fixture may accept product on either side to maximize test throughput.



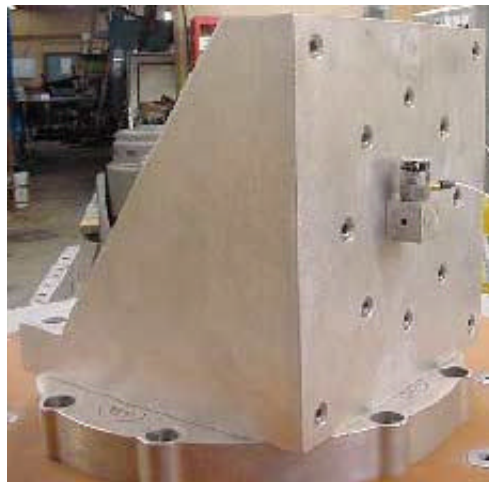
Automatic Horizontal Random Vibration Fixture;
Missile



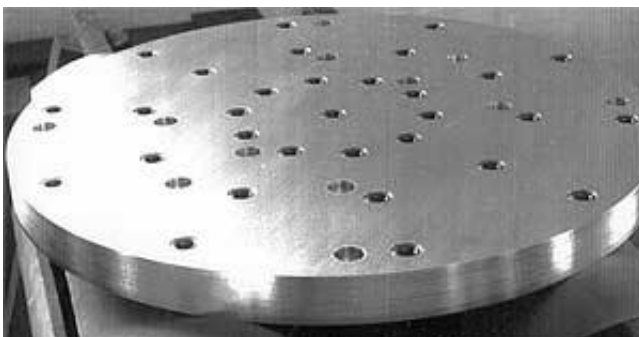
Model 09-C; 9 inch cube fixture



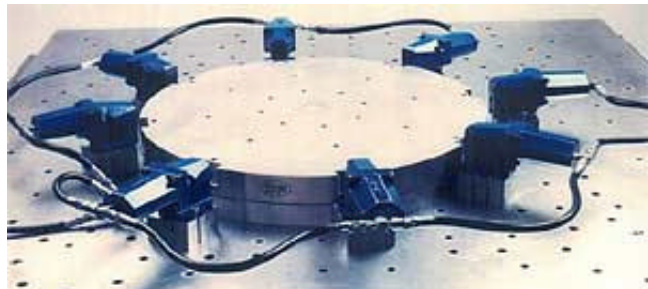
Model 07-CC; 7 inch cavity cube fixture



Model 1111-L; 11 x 11 inch "L" fixture



Model 26D-HP; 26 inch diameter Head Plate



Model 30D-LS; 30 inch diameter Lazy Susan