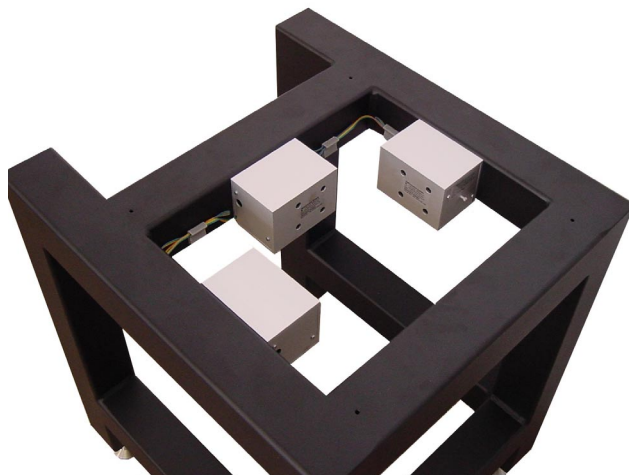


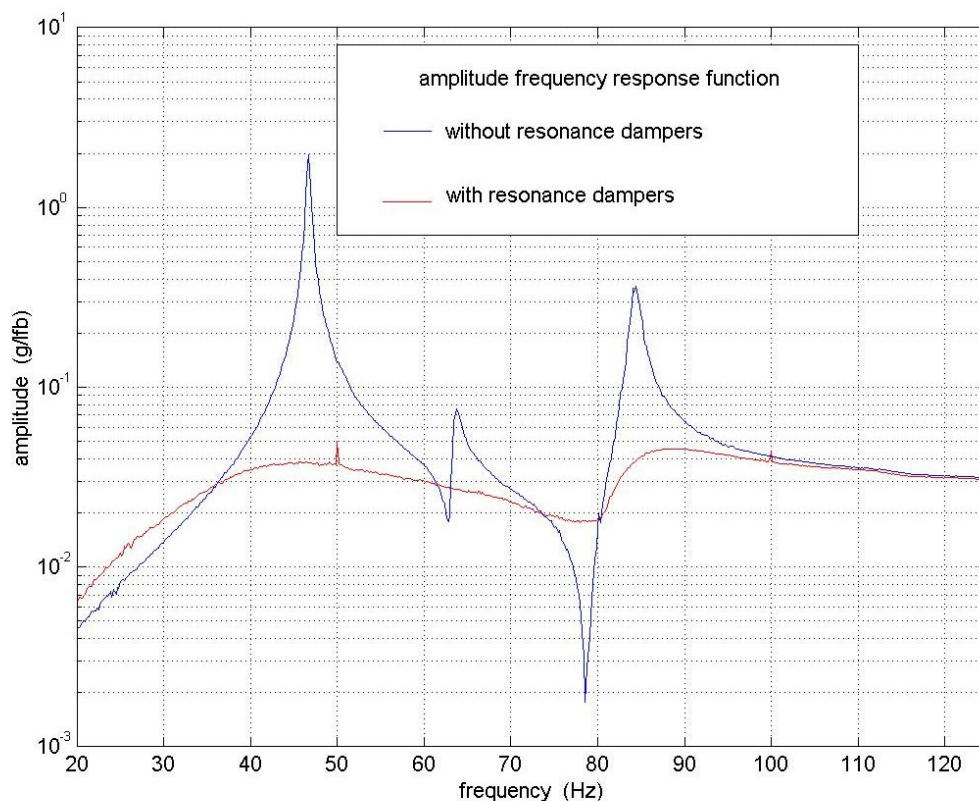


Resonance Dampers – for resonance damping of Halcyonics Support Frames

Halcyonics produces a range of steel support frames designed for strength and convenience, for use with the MOD systems. The internal resonances are suppressed by using specially developed active resonance dampers. The transmission of these damped frames is very close to that of an ideal damped second order low pass filter. The curves right show the response of a frame to a horizontal impulse, with and without active damping.



The isolation achieved using a MOD placed on one of these damped frames is essentially the same as when the MOD is set directly on the floor.



... unshakeable



The above measurement plot was achieved by measuring the transfer function of a standard Workstation 1L support frame.

An electro-dynamic shaker was used to generate a defined vibration on one side of the support frame. On the other side of the frame the acceleration was measured.

The measurement plot shows the amplitude frequency response function with and without resonance dampers. The curve without dampers shows some resonance peaks caused by significant reactions: The first peak is a side movement resonance. Peak no. 2 is the resonance for rotation motion and the third peak describes the resonance in front to back direction.