

Two-Mass Technology

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Two-Mass refers to a style of vibratory equipment where one mass (an exciter) is used to drive a second mass (trough). The exciter mass typically contains a motor and is connected to a trough using a combination of springs. Combining the two masses and the springs, a resonant frequency can be calculated.

When the operating frequency of the motor is close to this calculated natural frequency, the resonance that takes place within the system requires less horsepower to achieve the same amount of work as a single mass (brute force) system. The closer the frequency to the operating speed, the less horsepower is required.

The advantage of all this is two mass machines can adapt to changes in load without dampening performance. The two-mass system reduced horsepower requirement drastically lowers your energy consumption and cost, and requires less maintenance and adjustment.

The Principle of Natural Frequency

