

# The Everstill<sup>®</sup> Advantage



**Superior low frequency performance.** Starts to isolate at 0.7 Hz. Dramatic vibration cancellation, especially in the critical 1-10 Hz range.

Gainmatch<sup>™</sup> (patent pending). A switch allows users to easily choose between 3 gain settings. This ensures maximum vibration cancellation with assurance of stability for different user environments.

Patented active vibration cancellation technology. Ideal for small, lightweight, ultra-precision instruments.

**Active hard-mount.** No air. Robust plug and play design.

Advanced vibration sensor technology. Incorporates geophone type velocity sensors for sub-Hz performance. Better low frequency sensitivity than accelerometers.

#### **Everstill<sup>™</sup> Ordering Chart**

Catalog No.	Description	Hole Pattern
K-400	Everstill, 16 x 20 x 4 in. (400 x 500 x 100 mm)	No Holes
K-400E	Everstill, 16 x 20 x 4 in. (400 x 500 x 100 mm)	<sup>1/</sup> 4 - 20 on 1" Ctrs
K-400M	Everstill, 16 x 20 x 4 in. (400 x 500 x 100 mm)	M6 on 25mm Ctrs

Leveling foot to accommodate uneven tables and benches Self-leveling top

Easy start-up

Everstill

Gainmatch™

₹ 1- 8

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# **Everstill**<sup>™</sup> к-400

### Active Vibration Cancellation Platform

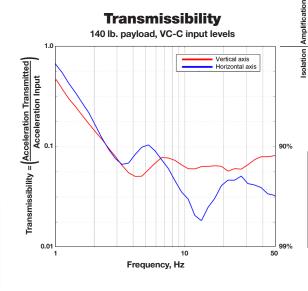
#### Enables higher resolution and more precise measurements

Introducing Everstill<sup>™</sup>, TMC's latest breakthrough in advanced floor vibration control. The patented Everstill K-400 is a benchtop vibration cancellation system which incorporates a "serial type" active architecture. This, combined with velocity sensors for enhanced, sub-Hz sensitivity, attains a dramatic level of low frequency vibration attenuation.

Designed to isolate ultra-precision instruments from building floor vibration down to below 1 Hz, the Everstill K-400 is ideal for optical microscopes, SPMs, and metrology instruments. With Gainmatch<sup>™</sup> (patent pending), easily choose one of three gain settings to achieve optimal performance in your environment.

With technology evolving from TMC's STACIS<sup>®</sup> piezoelectric vibration cancellation, Everstill is an active hard-mount that cancels vibration starting at 0.7 Hz. Specifically designed for maximum low frequency performance, Everstill excels in the critical 1-10 Hz range where precision instruments tend to be the most sensitive.

The portable, compact design is ideally suited for easy installation on work benches and tables. The only input requirement is power from a standard AC outlet.



## **Specifications**

U.S. Patent No. 8,899,393 (Other Patents Pending)

( Marked

Schematic architecture: Serial type active (actuator in series with isolator spring)

Vibration sensors: Geophone type velocity sensor (voltage proportional to velocity)

Leveling: Automatic Repeatability: +/- 0.02 in (+/- 0.5mm)

**Dimensions: (W x L x H)** 16 x 20 x 4 in. 400 x 500 x 100 mm

**Weight:** 55 lbs. (25 kg)

**Payload capacity:** 50 – 330 lbs. (23 – 150 kg)

**Isolation performance:** 4 – 7 dB @ 1.0 Hz > 20 dB above 2.5 Hz

Resonant frequency: 0.6 Hz

Active vibration cancellation bandwidth: 0.7 - 100 Hz

Passive vibration cancellation bandwidth: up to 1000 Hz

Facility requirement: 90-220V, 50/60Hz

Transportation: Internal lock-out restraint

**Top Plate:** Black anodized aluminum, with or without holes

**Caution!** Be careful when comparing our performance to alternative designs. Our data is actual measured performance, not a model. Furthermore, the data is taken with only lowamplitude, micron level vibration as the excitation.



Everstill<sup>™</sup> K-400, March 2016