

## CleanBench Aktiv™

vith Everstill™ Active Vibration Cancellation

## The CleanBench Aktiv Advantage

Patented Everstill technology. Serial type active architecture achieves vibration cancellation starting at 0.5 Hz.

Hybrid design with two stages of isolation. MaxDamp air isolators supported by Everstill. The performance of the two stages is additive.

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

Ease of installation and setup featuring retractable casters, accessible control panel and input ports, and a roll-off crate.



CleanBench Aktiv table supporting an optical microscope for a life-science research application (image courtesy of Harvard University)

CleanBench Aktiv is TMC's latest breakthrough in advanced floor vibration control.

CleanBench Aktiv combines TMC's patented Everstill active vibration cancellation technology with our MaxDamp air isolators. While Everstill provides outstanding low frequency vibration cancellation starting at 0.5 to 0.7 Hz, MaxDamp provides aggressive higher frequency isolation. The result is a system that isolates better than even our industry standard CleanBench table across the entire frequency range of interest, 0-50 Hz.

In the especially critical 1-3 Hz frequency range, CleanBench

Aktiv provides up to 32 dB more attenuation vertically and 23 dB more attenuation horizontally then the best air isolation tables (up to a factor of 40 improvement), an unprecedented performance in such a compact table.

Evolving from TMC's STACIS piezoelectric vibration cancellation, Everstill is an active hard-mount that cancels vibration starting below 1 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 MaxDamp pneumatic isolators excel at 5 Hz and above, complementing the Everstill performance and achieving a dramatic increase in performance across a wide frequency range.

The CleanBench Aktiv is configured in an ergonomic design, with a kneewell on the long side, a range of tops to select from with either a smooth surface of tapped holes, either ½-20 (imperial) or M6 (metric). The 50 mm (2 in.) thick top combines the best features of TMC's CleanTop steel honeycomb with our ultra-stiff, damped, layered platform design. The low profile, high density tops lower the overall floating center of mass ensuring inherent stability, even for relatively top-heavy payloads.

Designed to isolate ultra-precision instruments from building floor vibration down to below 1 Hz, the CleanBench Aktiv is ideal for optical microscopes, scanning probe microscopes, interferometers, and other surface metrology instruments.



Vertical Transmissibility

Horizontal Transmissibility

Frequency (Hz)

Frequency (Hz)

Frequency (Hz)

Frequency (Hz)

Frequency (Hz)

Improvement

CleanBench Aktiv flyer A4 181024

