

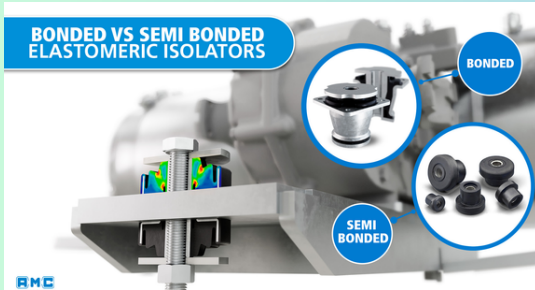
COMPANY CONNECT

TUESDAY 4/03/2025

HANCOCK INDUSTRIAL LIMITED



Bonded vs. Semi-Bonded Elastomeric Isolators: Understanding the Key Differences



Elastomeric isolators play a crucial role in vibration isolation systems, designed to mitigate shock and vibration in a wide range of applications. These isolators may be designed in two configurations: bonded and semi-bonded. While both are designed to serve similar functions, they exhibit distinct differences in terms of their performance, cost, and durability.

In this edition of our newsletter, we'll explore the key differences between bonded and semi-bonded elastomeric isolators, highlighting how each type behaves under load and which configuration is best suited for specific applications.

Bonded Elastomeric Isolators



Metal elements are bonded to elastomers on all load-carrying surfaces, providing better load distribution and higher stress tolerance, leading to higher spring constants and elastic energy storage. This configuration allows a more uniform stress distribution and minimizes local stress concentrations that can shorten the isolator's lifespan.

Hydraulic mounts, Hydraulic cone mounts, Cone mounts, Cone with fixation flange, CB, TF, cabin mounts, Marine type in V, VD mounts, AT anti vibration mounts, V shaped anti vibration mounts, DSD, DRD, Bushings, Sandwich mounts, AN mounts, NP mounts, SN anti vibration mounts

Semi-Bonded Elastomeric Isolators

The elastomeric load-bearing surface rests directly on the supporting structure, which can result in uneven stress distribution, potentially causing areas of stress concentration and a shorter service life. The elastomer's ability to bulge under load depends on friction at the interface, which can be disrupted by contaminants like oil or sand, further affecting performance.



SCH, SCB mounts, TFS mounts, SPS mounts

While semi-bonded isolators are cheaper, they may incur additional costs due to extra machining and reduced service life, making them less ideal for long-term use compared to bonded isolators. For consistent load-deflection characteristics over time, bonded isolators are recommended.



The Vibration Isolator Pro Bluetooth Accelerometer Can Help You Find the Perfect Anti-Vibration Mount!



Looking for precise vibration measurements to select the right anti-vibration mount? The Vibration Isolator Pro Bluetooth Accelerometer is your solution! Designed for use with the Vibration Isolator Pro app, this advanced tool is compatible with both iOS and Android devices, allowing you to measure vibrations up to 500Hz much higher than the standard 50Hz range of your phone's integrated accelerometer.

With this device, you can:

- Perform FFT (Fast Fourier Transform) vibration analysis for accurate measurements.
- Connect directly to the AMC-Mecanocaucho engineering team for expert guidance.
- Receive a detailed report with vibration data and isolation levels right to your inbox.



Advantages:

- Compact design for easy portability
- 3-axis accelerometers for comprehensive vibration measurements
- DC to 500Hz useful bandwidth for precise, high-frequency data
- Low noise for accurate readings
- iOS and Android compatibility for flexibility across devices
- Direct connection with AMC-Mecanocaucho's technical team for expert support



Get your hands on the Vibration Isolator Pro Bluetooth Accelerometer for quick, reliable, and precise vibration analysis, and ensure you're using the ideal anti-vibration mount for your application!

Customer Feedback

Cherry from The HVAC Shop expressed her gratitude, saying, "Thank you for the wonderful service."

Steven Liang from GPC Ltd. recently shared his satisfaction with our service, saying, "The isolators arrived yesterday in perfect condition and were exactly what we expected. He expressed his appreciation for the timely and accurate delivery."

We're grateful for feedback like this and always strive to provide the best experience for our customers.