

WHY CHOOSE AIR ISOLATION?

Firestone Airmount™ Isolators and Marsh Mellow Springs eliminate the noise, resonance, and corrosion problems of metal coil springs — with no seals, no rod, and no maintenance schedule.

1 WHY AIR ISOLATORS OUTPERFORM TRADITIONAL SPRINGS & CYLINDERS

ATTRIBUTE	COIL SPRING	FIRESTONE AIRMOUNT™	PNEUM. CYLINDER
Natural Frequency	Fixed — cannot be tuned	Adjustable via air pressure ✓	Not applicable — active device
Vibration Isolation	Poor — resonance at fixed freq	Excellent — passive, all-dir. ✓	None — generates its own vibration
Load Range	Fixed by spring rate	Wide — just adjust pressure ✓	Requires valve/flow changes
Corrosion Resistance	Prone to rust & fatigue	Rubber/fabric — no metal ✓	Rod seals fail in dirty environments
Side Load Handling	Needs rigid guides	Excellent — flexible sidewalls ✓	Poor — causes rod seal failure
Maintenance	Replace when fatigued	None required ✓	Seals, rod, fluid require upkeep
Noise & Friction	Metal-to-metal contact noise	Silent — no metal contact ✓	Valve & actuator noise
Fail-Safe	Locks at fixed height	Deflates slowly — safe ✓	Can drift or slam on seal failure

2 FIRESTONE AIRMOUNT™ ISOLATORS — 5 SERIES, 64 CONFIGURATIONS



Double convoluted Airmount™ cross-section showing fiber-reinforced rubber bellows and bead plates.

SLEEVE TYPE	STYLES	LOAD RANGE	KEY FEATURE
Shaped	4	175–613 lbs	Ultra-compact at min height. Tight clearance.
Single Convoluted	17	1,100 – 97,875 lbs	Low nat. frequency, passive isolation, adjustable pressure.
Double Convoluted	17	810 – 67,488 lbs	3"–10" stroke range. Best balance of stroke and load.
Triple Convoluted	8	High load / stroke	Lowest natural frequency. Maximum stroke.
Reversible Sleeve	18	33 – 6,375 stroke	Small lateral spring rate. Highest stroke range.

3 KEY APPLICATIONS & MARSH MELLOW SPRINGS

MARSH MELLOW™ SPRINGS

A solid elastomeric pad isolator — no air supply, no plumbing, no maintenance. The simplest drop-in replacement for rubber grommets and coil spring mounts.

- **What It Is:** Solid rubber compound molded into a cylindrical isolator. Absorbs vibration through material deflection — no compressed air required.
- **Load Range:** Light equipment up to 1,000+ lbs per mount. Stack multiple mounts for higher capacity without added complexity.
- **Best For:** Pumps, fans, small compressors, and light machinery. Simple 4-bolt installation: no air lines, no plumbing.
- **vs. Airmount:** No air lines or fittings — lower cost, zero maintenance. Less pressure-tunable; ideal where simplicity wins.

Vibrating Screens & Shakers

Isolate frame vibration from structure. Replace coil springs prone to fatigue and resonance.

Blowers, Motors & Compressors

Prevent vibration transmission to mounting frame. No seals, no rod, no lubrication required.

Bin Hoppers & Feeders

Variable loading — Airmount adjusts pressure automatically. Metal springs bind or over-extend.

Precision Machinery & Labs

Isolate sensitive equipment from floor vibration. CMM tables and press isolation.

Presses, Clamps & Conveyors

Replace pneumatic cylinders — no rod seal failure, no side-load sensitivity, no plumbing.



Marsh Mellow™ Spring