Novel Polyamide Anti-Vibration System Technology

Reduce NVH without adding weight or complexity

Specifically designed to dampen noise, vibrations and harshness while also providing enough rigidity for structural applications, Vydyne® AVS improves cabin sound and reduces part weight. AVS dampens vibrations better than traditional PA66, especially at the higher frequencies of EV motors. And our application development engineers have developed physical validation tests for predictive models.

Highlights



75-84% reduction in cabin noise



High mechanical properties across a broad temperature range



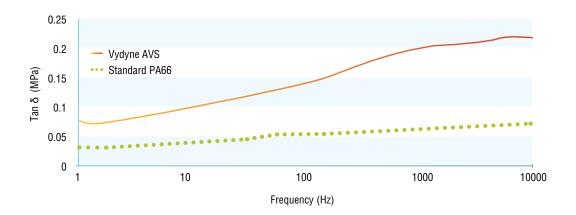
30-40% weight reduction when compared to die cast aluminum



Significant improvement of tan delta, especially at high frequencies

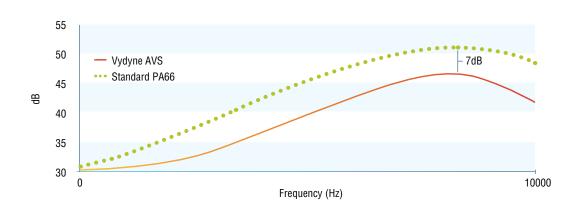


Vydyne AVS dampens vibrations better than traditional PA66, especially at higher frequencies.



Cabin Sound Pressure

Reducing vibration at the mounting location reduces cabin sound on average by 7 dB. That translates into a 75-84% improvement in cabin noise, without adding weight.



Grade	Description	Fully characterized for modeling
Vydyne AVS 1AF1	High strength, high stiffness, heat stabilized, 50% glass fiber reinforced with standard damping performance	\bigcirc
Vydyne AVS 4AC5	Heat stabilized, 35% glass reinforced, advanced internal damping at operating conditions	\bigcirc
Vydyne AVS 4AF5	Heat stabilized, 50% glass reinforced, advanced internal damping at operating conditions	\otimes

Click here to view technical data sheets

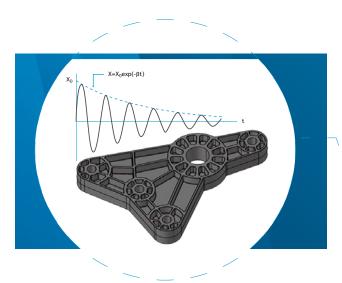
dB Reduction	Noise Improvement
-2	37%
-4	60%
-6	75%av
-8	84%
-10	90%



Applications

Click links for more information

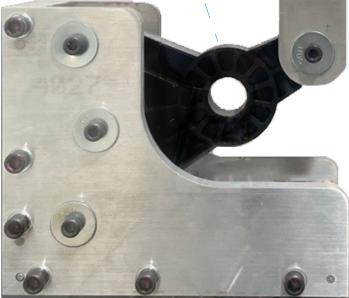
- / Body Stiffeners & Crash Inserts
- / Engine Mount Components
- / Transmission mounts
- / Torque rods
- / Accessory brackets
- / Suspension mounts
- / Bushings





Ascend Structural Test Platform

We designed a new platform and method to physically validate FEA-predicted resonance as well as durability and maximum load. Our ADEs are ready to support you with CAE, mold flow analysis, NVH testing, thermal cycling simulation and material, science and process support.



For more information, contact our expert applications specialists or visit ascendmaterials.com.

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