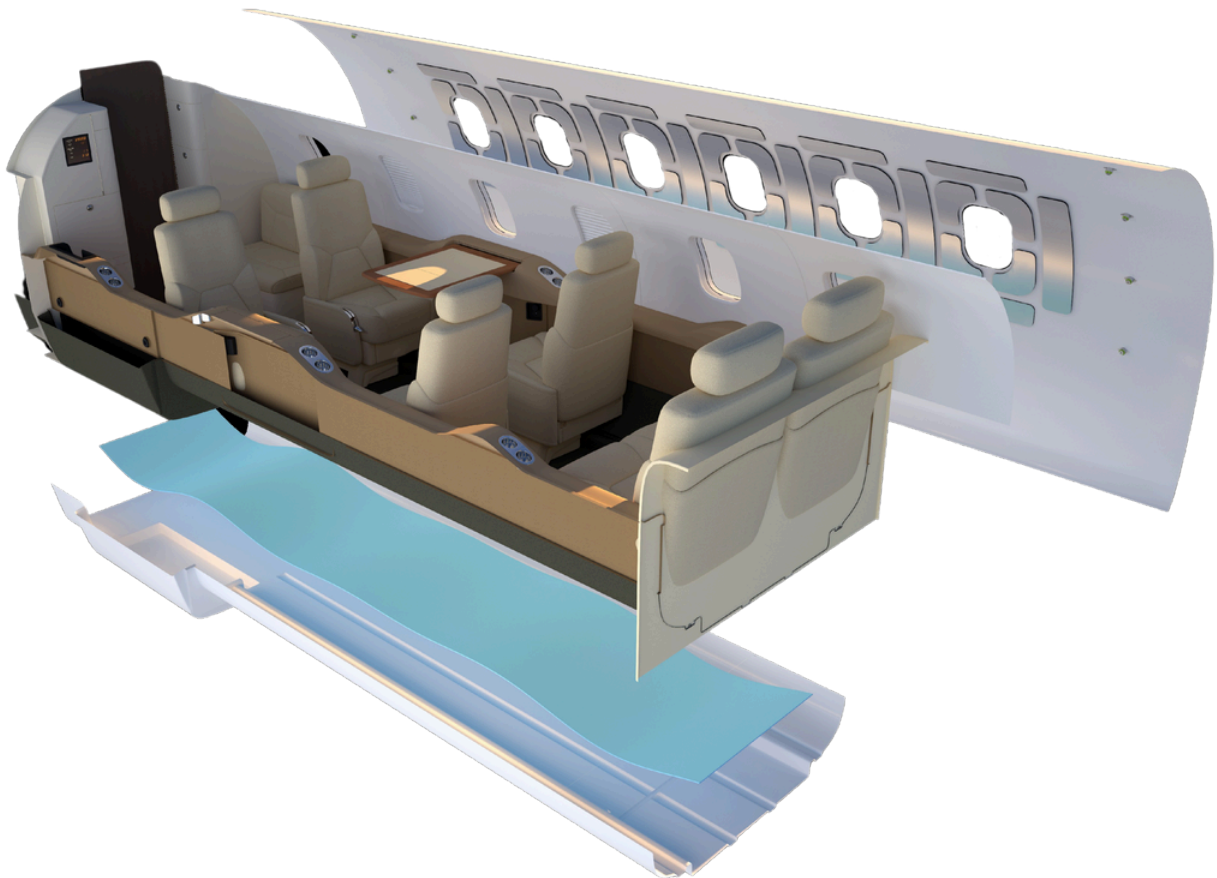


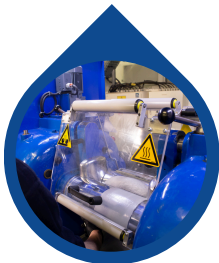
TRANSFORMING CABINS INTO QUIET SPACES

We design and manufacture high-performance rubber-based solutions, from material formulation to engineering, production, and testing, for demanding environments.



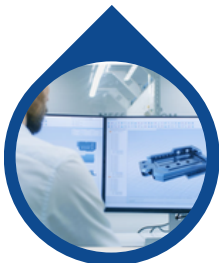
Make your mission a success

FROM CONCEPTION TO TESTING, ALL WITH ONE PARTNER



Formulation

Expertise in developing materials tailored to demanding environments such as aerospace and defense.



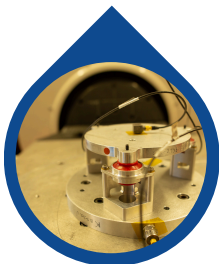
Engineering

Design of robust mechanical solutions with advanced simulation capabilities



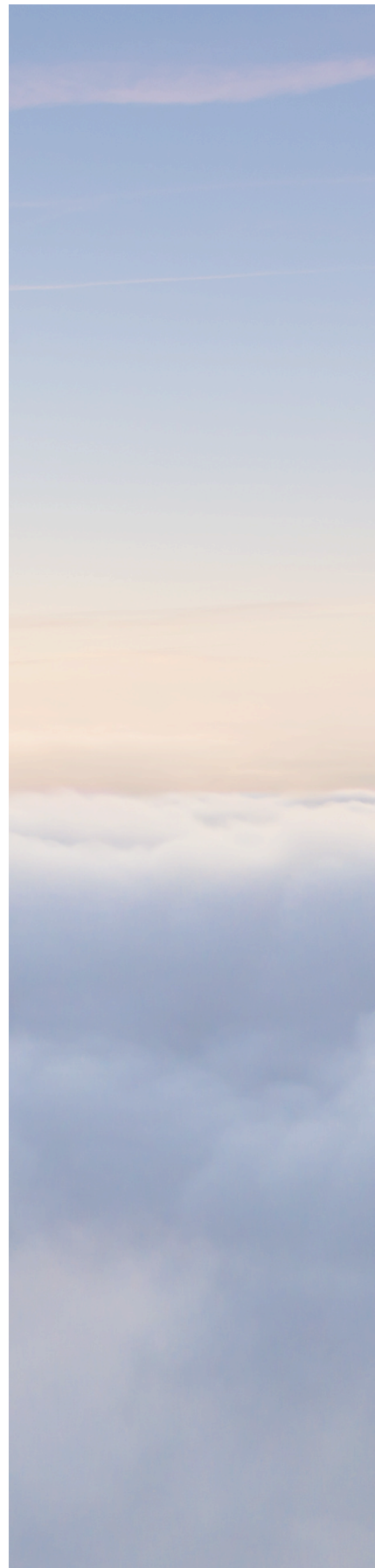
Manufacturing

Precision manufacturing from small to medium series



Testing

Testing for shock, vibration, and environmental conditions

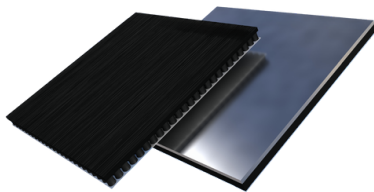


TRANSFORMING CABINS INTO QUIET SPACES

Discover our comprehensive suite of solutions with SMACSONIC®, SMACBARRIER®, and SMACWRAP®, Tuned Mass Dampers and Shock Mounts designed to transform cabins into serene and quiet spaces. Whatever your needs and projects, we have the technical expertise to meet them, and our dedicated team is entirely at your disposal to support and guide you every step of the way.

MITIGATING STRUCTURAL VIBRATION WITH CONSTRAINED DAMPING LAYERS

SMACSONIC® solutions greatly reduce unwanted vibrations and resonances, which can lead to mechanical fatigue and noise in lightweight structures. Utilizing shear deformation within a viscoelastic layer, they dissipate energy as heat, providing effective damping across a broad frequency range. These solutions offer an exceptional damping-to-weight ratio, ideal for vibration attenuation in fuselages, walls, and cabin interiors



SMACSONIC®

Surfacic Weight : From 1.4 kg/m² (0.29 psf) to 4.4 kg/m² (0.90 psf)

Applications :

- Ideal for use on aircraft fuselage
- Suitable for interior cabin applications

Features :

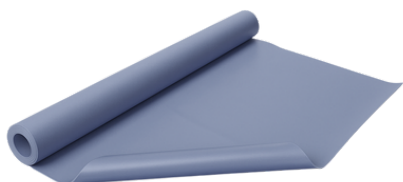
- Provided with an adhesive on one side for easy installation
- Available with different constraining layers : Aluminum & CFRP
- Fire resistant following FAR 25.853 and FAR 25.856



- ✓ **Lightweight**
- ✓ **Fire tested**
- ✓ **Flight-proven**
- ✓ **Easy Installation**

LIMITING AIRBORNE NOISE TRANSMISSION

SMACBARRIER® solutions are designed to reduce airborne noise transmission, enhancing acoustic comfort and operational efficiency. Their flexible design absorbs and blocks sound effectively, ensuring reliable sound insulation across various frequencies and challenging conditions. Engineered for aerospace, space, and defense applications, they provide high material reliability and improved acoustic and structural performance.



SMACBARRIER®

Surface Weight : 1.0 kg/m² (0.20 psf) or 2.0 kg/m² (0.41 psf)

Applications :

- Ideal for use in aircraft fuselages and bodies
- Suitable for acoustic insulation of floors and interior panels

Features :

- Can be provided with an adhesive on one side for easy installation
- Excellent stability across a wide temperature range, from -55°C to +170°C (-67°F to +338°F)
- Fire resistant following FAR 25.853 & FAR 25.856

ENHANCING COMPOSITE DAMPING AND ACOUSTIC PERFORMANCE

SMACWRAP® is an advanced unconstrained damping layer solution designed to enhance the performance of composite structures. Designed to be embedded inside composite parts, composed of a lightweight and high-damping viscoelastic material, SMACWRAP® is engineered to significantly improve behavior under impact and reduce sound characteristics and structural vibrations.

Surface Weight : From 0.13 kg/m² (0.03 psf) to 2.41 kg/m² (0.49 psf)

Applications :

- Damping for composite structures
- Noise & Fatigue reduction
- Impact and splintering protection for composite parts
- Hinges and flexible flaps inserted inside composite parts

Features :

- Available with an adhesive on one side for easy installation
- Compatible with CFRP, GFRP, thermoplastics, and metals
- Invisible when embedded inside composite layers



SMACWRAP®

OPTIMIZING STRUCTURAL STABILITY WITH PRECISION-TUNED VIBRATION CONTROL

Tuned Mass Dampers (TMD) are precision-engineered devices designed to reduce vibrations in structures by counteracting resonant vibrational energy. They consist of a mass, a rubber spring and a fixing plate, all tuned to the specific frequency of the structure to which they are attached.



TUNED MASS DAMPER

Material properties :

- Customizable mass and stiffness to target specific frequencies

Applications :

- Ideal for reducing vibrations in aircraft structures
- Suitable when specific frequencies needs damping

Features :

- Precision-engineered for effective vibration control
- Durable construction for long-term reliability
- Easy integration with various structural designs

REDUCING VIBRATION TRANSMISSION WITH EFFECTIVE COMPONENT DECOUPLING

Cabin Elastomeric Isolators are advanced vibration isolation solutions designed to minimize the transmission of vibrations and noise within cabin environments. Made from high-performance elastomeric materials, these isolators provide excellent damping characteristics and durability. Their flexible design allows for easy integration and reliable performance in demanding conditions.

Material properties :

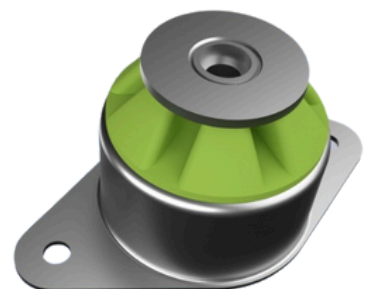
- Available in various stiffnesses and nominal load to suit specific isolation needs

Applications :

- Ideal for decoupling trim panels from the fuselage in aircraft
- Enhances avionics performance by minimizing vibration

Features :

- Made from high-performance elastomeric materials
- Effective vibration damping and noise reduction



SHOCK MOUNT

Our company specializes in developing innovative solutions for vibration damping and acoustic insulation in the aerospace, space, defense, mobility and automotive sports sectors.

Our mission is to provide high-performance products that enhance the safety, comfort, and efficiency of land, space, air or sea vehicles.

By collaborating closely with our clients, we meet their expectations by offering tailored solutions, superior quality materials, and expert technical support for every project.



Find out more capabilities on our brochures :

Precision solutions for shock and vibration protection
Expertise in molding and overmolding for reliable sealing



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