Technical Data

Automotive Applications

Exhaust Decoupling Rings & Mesh Sleeves

Description:

KnitMesh Technologies® knitted mesh rings are used extensively in exhaust decoupling joints and load support assemblies to absorb vibration, take up thermal expansion and reduce noise.

How They Work

Transverse mounted engines generate high levels of vibration and consequently require a robust jointing system between the engine manifold and exhaust system capable of withstanding the stresses involved.

With its unique structure knitted mesh rings have the ability to withstand the harsh exhaust gas environment and therefore provide decoupler manufactures with an ideal solution to the problem of energy absorption.

Mesh rings are constructed from corrosion resistant stainless steel and can be produced in a cylinder configuration or shaped to suit the decoupler housing as required. Flexible tube assemblies can benefit from having a low cost mesh sleeving positioned either under or over the braid which reduces vibration and noise.

Mesh sleeves can also protect the assembly from abrasion and in some instances can enable the braid coverage to be completely removed hence leading to a cost reduction.

Features and Benefits

- Withstand high temperatures and corrosive exhaust gas environment.
- Excellent vibration damping capability.
- Excellent sound attenuation properties.
- Made endless to eliminate any possibility of unwinding.
- Low cost manufacturing facilities.
- Fit any shape or size of ceramic brick.
- Prototypes can be produced cheaply and quickly from low cost die sets reducing product development time..
- Stitch shape can be modified to control performance characteristics of the sleeve.
- In-house test facility for fatigue testing at operating temperatures.

Quality Assurance

KnitMesh Technologies® is accredited to ISO9001:2008, ISO14001:2004, OHSAS18001:2007, PAS 99:2006 and ISO/TS 16949:2009

KnitMesh Technologies®

Innovative Mesh Solutions

Customer Support

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