



RUBBER TO METAL BONDED PRODUCTS

URI provides its customers with precision solution for metal to rubber bonded products which include Rubber NVH (Noise, Vibration, Harshness) product, Rubber Vibration Isolator, Rubber Mounts, Bump Stopper, Grommets, Ant Vibration Pad, Rubber Coupling and many more.

URI design and develop Custom Rubber Mounts, Vibration Isolator and Rubber to Metal Bonded Vibration Mount system besides the developments of customer designed Mounting System. These Isolators are used to reduce vibration, impact or shock load as well as reduce the noise level during application. URI has extensive expertise and experience in vibration isolator design, rubber properties tuning to specific application, design of mounting system to accommodate the specific application load and shock properties, custom rubber material development as per application specification.

Typical Features

- It is engineered at the rubber and substrate level to create robust bonding.
- Unique products design possibilities
- Designed as per customer requirements
- Molding by compression, transfer and injection method
- Metal treatment by mechanical (shot blasting) and chemical (phosphating) method
- Bonding with any type of metal like MS, SS, Aluminum, Brass etc.
- Use of branded bonding agent like chemlok, thixon, megum
- Use of any polymer like NR, SBR, CR, EPDM, PU, Silicone, NBR depend on application
- Properties and performances (bond strength, load deflection, endurance, dynamic mechanical properties, physical properties) are tested as per international standards SAE, BS, JIS, ASTM, IS, IRC, MOST, TY, GOST

Typical Items

- Engine Mounting
- Pad Mounting
- Suspension Bushes
- Vibration Damper
- Rubber Isolators
- Flexible Mounting

- Axle Bumper

- Track Pad
- Transmission Mounting
- Radiator Mounting
- Sand witch Mounting
- Cab Mounting
- Anti-vibration Pad
- Hanger Silencer
- Silent Block Bush
- Bump Stopper
- Flexible Coupling
- Bridge Bearing Pad
- Rubber Bushing
- Bracket Assembly
- Sandwich Mounting
- Radiator Mounting
- Engine Seal
- Body Mounting
- Center Bearing Rubber
- Others

Application

Metal to Rubber Bonded parts have a large number of application in Automotive, Agricultural Machineries, Construction Equipment, Aviation, Marine Engineering, Defence Vehicles, Railways, Mining Equipment, Engineering Industry, electrical & Electronics Equipment, etc.

Engine Mounting

An Engine Mounting which is base to every engine in a vehicle are used to reduce vibration, noise and shock impact load in the vehicles for passenger comfort and engine durability. URI design and develop various types of Engine Mounting as per customer inputs and designs. Both Natural and Synthetic rubbers are used depending on the application of the products. Best compound, metallurgy, adhesives and process areas used for the manufacturing of the mounting as meets the requirements of OEM mounting for dynamic, spring rate and bonding properties.

Sandwich Mounting

Sandwich Mountings which comprises of rubber section sandwiched or bonded between metal plates having large load carrying capacity are used for suspending engine on road vehicles. These are used as vehicle suspension spring and as mounting for acoustic chamber, hoppers and various type of heavy plant installation.

Bobbin Mounts

Bobbin Mounts are designed to protect instruments and equipment from the effect of shock and vibration. Bobbin Mounts are very much effective either in shear or compression modes. These are used for vibration reduction and shock protection in motors, compressors, electrical equipment and automotive application.

Metacone Mounting

Metacone Mounting are specially designed to give high load capacity with relatively large static deflection. Cone Mounting are safe in conjunction with the use of overload and rebound washer which control and limit the movement of the mounted equipment under vehicle stop and start, torque reaction braking force, marine seaways motion and shock free and suitable for both engine and cab suspension.

Bump Stopper

Bump Stoppers or Buffer are designed as de-acceleration device to protect structure or equipment from impact force. Stopper are used as a resilient stop providing progressive stiffening to a suspension system under load. Typical application are in automotive, industrial plant, oscillating machinery, erasers, sensitive equipment, vehicles collision petroleum, impact protection for door, bonnets, etc.

Aeon Spring

Aeon Spring act as impact protector in vehicles, structure, and equipment from impact force.

Transmission Mounts

Transmission Mounts are designed to protect transmission from vibration, shock and noise.

Anti-Vibration Mounting

Flange type mount typically used in application involving the transportation of the equipment. It is designed to achieve high shock damping under compressive load.

Radiator Bracket Mounting

Radiator Mounting are designed to protect the radiator from vibration and shock damage.

Rubber Centre Bearing

Center Bearing or Carrier Bearing are intermediate bearing assemblies used in a wheel drive and front engine, rear wheel drive vehicles, connecting the front and rear drive shaft.

Rubber Coupling

A Coupling is a device used to connect the shaft together at their end for the purpose of transmitting power. Rubber coupling permits a quick and simple connection to be made between a flanges specially a ply wheel and a shaft. Flexible coupling are used to transmit torque from one shaft to another when two shafts are slightly misaligned.

Track Pad & Pin

URI is recognized and well established supplier of rubber products to Defence Industry. A wide range of Rubber Products have been developed to withstand the extreme operating environmental of military. URI manufacture Metal to Rubber Bonded Track Pad and Track Pin which are used in tracked vehicles like main battle tank and other armored Defence vehicles.