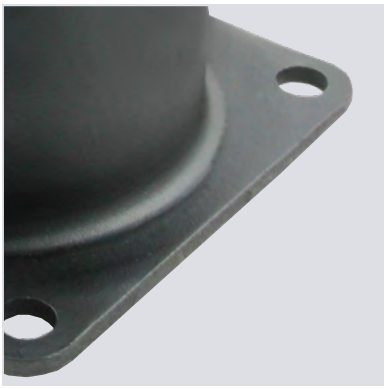

Products & Solutions

for vibrations control

Epidor

Seals and
Rubber Technology

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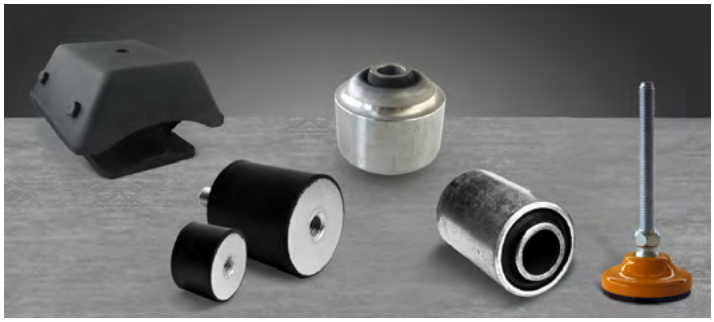


WHO WE ARE:

EPIDOR Seals and Rubber Technology is the company of EPI INDUSTRIES Family of Companies for the sealing and vibration control business. We have a wide range of high added value solutions, thanks to our collaboration with manufacturers of international prestige.

OUR MISSION:

EPIDOR Seals and Rubber Technology's team and resources are oriented towards providing a direct service to machinery manufacturers as well as those industries whose processes require solutions for vibration damping and isolation.

OUR RESOURCES:

BUSINESS MANAGER
. Marketing policies: negotiation of prices, products, marketing, proposals for new products.
. Development of the range
. Value-added services
. Sales Campaigns

KEY ACCOUNT MANAGER
. Key Account Management
. Impulsion of our projects
. Commercial support to the sales team
. Commercial coordination of suppliers

CUSTOMER SERVICE
. Key Account Support
. Multichannel customer contact
. Incidence management
. Solution of claims
. Shipment tracking

PRODUCT ENGINEERS
. Technical knowledge
. Technical advice and failure analysis
. Advice on special applications
. Training: Sales Team, Customers, Universities
. Document support

BUYERS
. Supplier Management
. Stock management
. Procurement process
. Enquiries / Offers / Complaints
. Product Availability
. E-procurement

PRODUCTION
. Technical advice
. Design and manufacture
. Materials research and testing
. First Sample Reports
. R+D+I policy

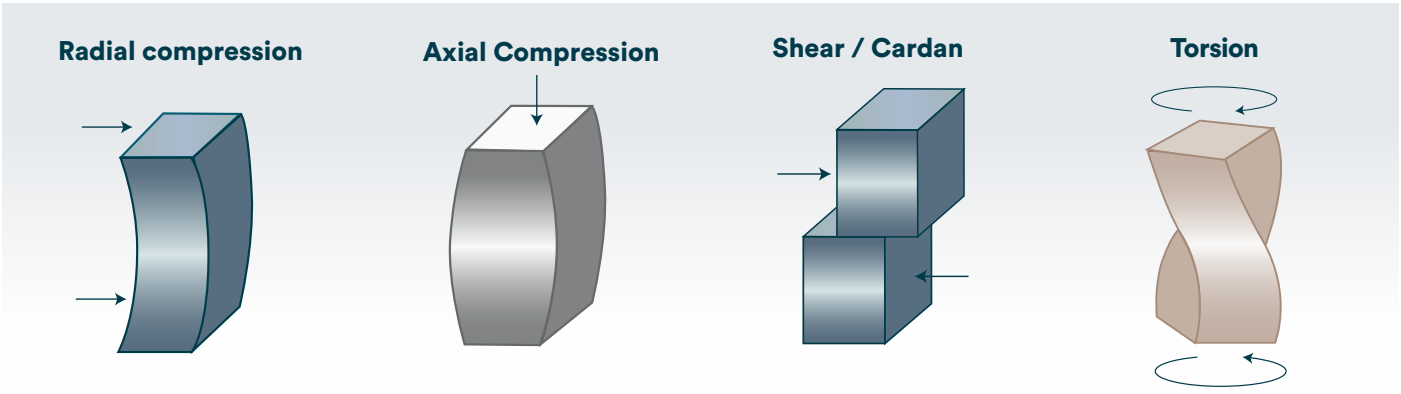
OUR SERVICES

We provide solutions that protect other machines or people from the propagation of vibrations:

- Analysis of the problem caused by vibrations in production equipment based on the information provided or collected during a diagnostic visit.
- Study and design of the proposed anti-vibration solution, providing detailed drawings if necessary.
- Economical offer of the appropriate isolation elements for each specific case.

Equipments are subjected to various movements and loads in all directions (X, Y, Z) which generate episodes of vibrations, with negative impact on the machine.
The elements that are installed in the equipment to isolate these vibrations are given the generic name of **"anti-vibration supports"** or *Silent Blocks.* This catalogue presents the most popular supports, with a brief description and the types of loads they can support.

CARGO TYPES



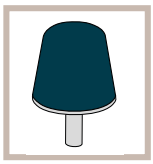
Anti-vibration mounts, on the other hand, are made of elastomers and must often be installed on equipment that is outdoors.
The following table presents the elastomers available for the manufacture of anti-vibration supports.

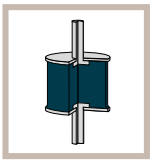
AVAILABLE MATERIALS

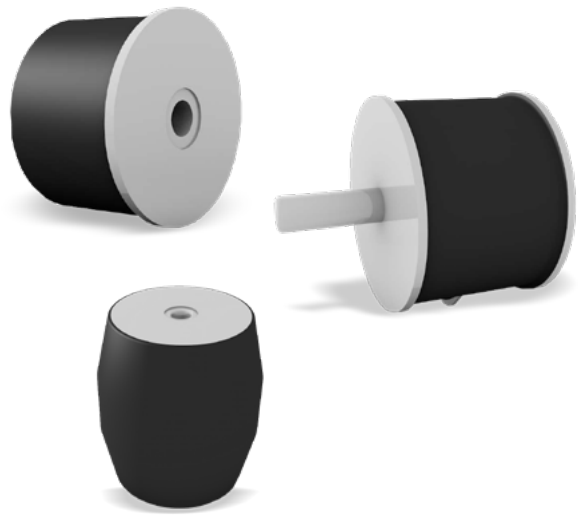
	NR	NBR	AEM	EPDM
Hardness range (Shore A)	35 - 40	45 - 85	55 - 85	40 - 80
Tensile strength	✓✓	✓	✓	✓
Rebound elasticity	✓✓	✓	X	✓
Damping	Low	Medium	High	Medium
Working Temperatures	-45 °C ... + 70 °C	-20 °C ... + 90 °C	-20 °C ... + 120 °C	-40 °C ... + 110 °C
Weather resistance	✓	✓✓	✓✓✓	✓✓✓
Resistance to ageing	✓	✓✓	✓✓✓	✓✓✓
Resistance to acids	✓✓	✓✓	X	✓✓✓
Resistance to bleach	✓✓	✓✓	X	✓✓✓

COMPLETE RANGE OF PRODUCTS FOR VIBRATION CONTROL AND ISOLATION IN MACHINES, EQUIPMENT AND WORKING ENVIRONMENTS

CYLINDRICAL AND DIABOLO SHAPED SUPPORTS. CYLINDRICAL AND CONICAL STOPS







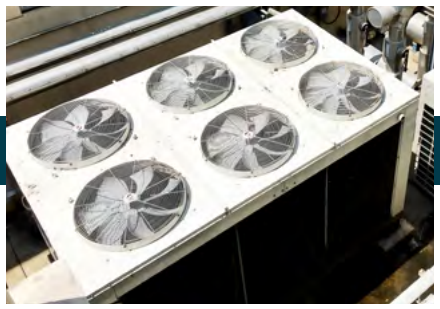
They are the most used elements for vibration isolation.

They consist of a conical or cylindrical piece of vulcanized rubber between two plates provided with threaded connections: male - male; female - female and male - female.

Versions without a threaded connection are available and are then used as an end stop for shock absorption.

Types of loads for cylindrical supports: radial, axial and shear.

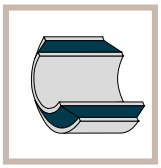
Types of loads for conical tops: axial.



SCOPE OF APPLICATION

Very wide:

- Small machinery
- Fans, pumping units
- Feet for small machines
- End stops for suspensions or stroke ends
- Stops for impact on crane rails



CYLINDRICAL AND SPHERICAL BUSHES

Supports consisting of two concentric cylindrical bushes or a spherical bearing.

Natural or synthetic rubber is vulcanized between the metal bushings, allowing “buoyancy” between parts.

Some models are capable of working with “cardan deflection” loads.

Types of loads: radial and axial compression, torsion and shear / cardan.

SCOPE OF APPLICATION

Suitable for mechanical systems such as:

- Hinges, suspensions, torsion bars and shock absorber mountings
- Tie rods for stabilizer bars in railway vehicles

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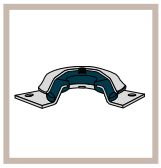
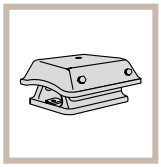
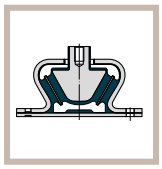
MACHINE MOUNTS





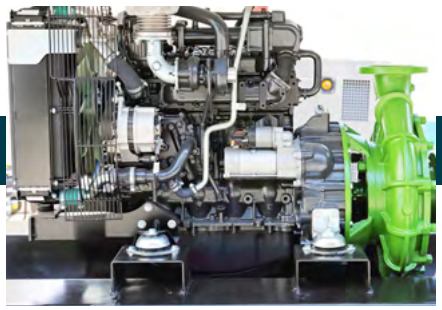


Conical, V-shaped and machine supports.

Some models are of “active safety” which allows the assembly on mobile structures and offer a great resistance to lateral shocks. Others have different stiffnesses according to X, Y or Z directions.

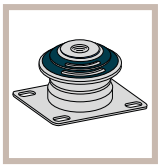
There are executions with zinc and phosphated metal surfaces that make them suitable for applications in corrosive environments.

Types of loads: shear, compression.



SCOPE OF APPLICATION

- Press
- Cutters
- Compressors
- Machine tools



CONICAL SUPPORTS

Elastic union elements, formed by two conical bushings vulcanized with natural or synthetic rubber.

This design allows to absorb progressive loads in Z axis and shocks or misalignments in X, Y axis.

Some models are of “active safety”, since in case of deterioration of the support, the motor or machine fixed to it cannot be detached from the structure.

Types of loads: axial and radial.

SCOPE OF APPLICATION

Indicated for the suspension of engines, cranes, cabs as well as static applications in any type of vehicle

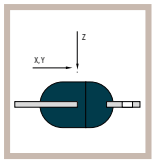
INSTRUMENT SUPPORT, “U” AND “O” MOUNTS

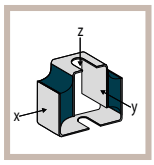
Instrument support are used to isolate vibrations from electronic components, measuring devices and pressure vessels.

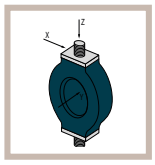
The U-shaped supports isolate vibrations and impacts in such a way that the elasticity in the three load directions is different.

The O-supports are soft in X, a little more rigid in Y and have maximum stiffness in Z.

Types of loads: compression and shear.

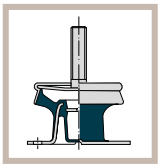


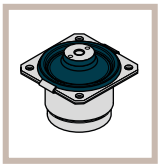


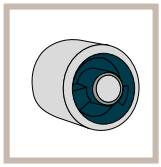


SCOPE OF APPLICATION

- Assembly of instrumentation elements
- Small mechanisms
- Their great capacity of static deflection makes them suitable to protect from parasitic vibrations in assemblies of electronic devices on machines in movements.







HYDRAULIC SUPPORTS

Supports consisting of two concentric conical bushes, vulcanized with natural or synthetic rubber and with an intermediate filling of hydraulic fluid.

This support is recommended to isolate low frequencies or when working near the resonance zone.

Some models are of “active safety”, since in case of deterioration of the support, the motor or machine fixed to it cannot be detached from the structure.

Types of loads: torsion, axial and radial.

SCOPE OF APPLICATION

Isolation of heavy machines as:

- Press
- Cutters
- Die-cutting machines
- Machine-tools
- Compressors

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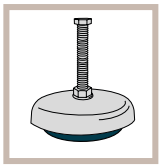
FEET FOR MACHINES LEVELLING



They are supports that isolate the vibrations of the equipment, at the same time that they allow its leveling being adjustable in height.

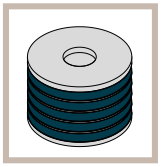
The base of the element in contact with the floor is usually made of NBR elastomer as it is resistant to contact with oils and hydrocarbons.

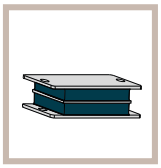
We can provide articulated units to better adapt to the inclinations of the floor.

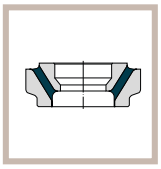
All stainless steel versions are available. Types of loads: axial.

SCOPE OF APPLICATION

- Especially in machines of the sectors:
- Packing and packaging
- Food & Beverage
- Pharmacy
- Chemistry
- Plastic Injection







SPECIFIC DESIGNED SUPPORTS

Supports of different designs to solve different problems.

In all of them, the metal components are vulcanized with natural or synthetic rubber.

Types of loads: depending on the solution adopted (compression, torsion, shear).

SCOPE OF APPLICATION

- Industry: heavy, naval, railway, aeronautics and military

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