



WEAR™ (Wire Energy Absorbing Rope) pipe restraints are uniquely packaged wire rope isolators designed to protect structures from steady state vibration and isolate them from seismic and dynamic loads. These new generation energy absorbing restraints feature simple construction. There are no oils, seals or complex moving parts required to perform their function. The design has eliminated the problems often associated with hydraulic or mechanical restraints which are complex and prone to failure.

The Wire Rope Isolator, which is the basic element of the technology has been successfully used by the military for more than 25 years. As a result, it conforms to government and military quality control requirements. The restraint is thus exempt from surveillance testing. In-place visual inspection is all that is required to assure operability. The WEAR™ can be provided with a wide range of piping accessories and can be supplied to ISO 9001, Mil-Q, Mil-I, B31.1 or ASME Section III subsection NF.

Options Available

Various end connections are available to meet existing hardware such as Bergen Paterson, Basic Engineers, PSA, Grinnel and others. For sizing or specific application information, call your local representative or ITT Enidine directly.

Typical Applications

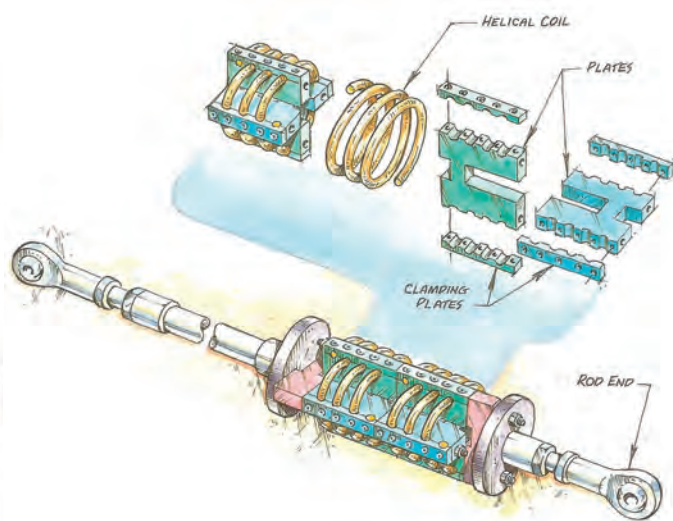
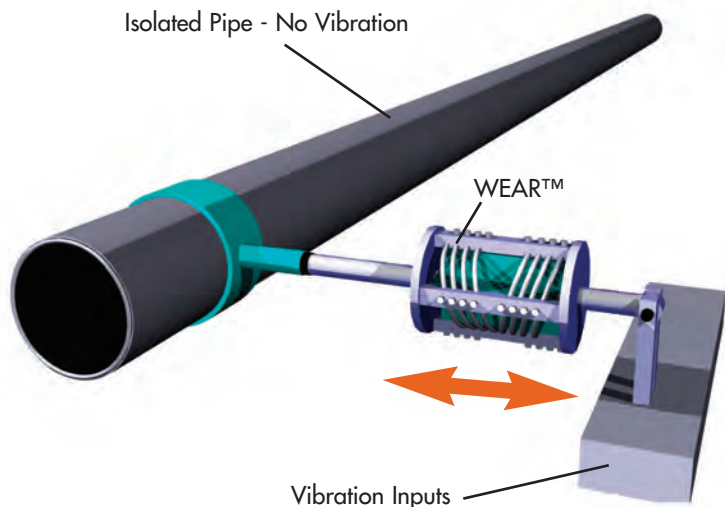
- Pipe Restraint
- Hydraulic Transients
- Power Generating Plants
- Chemical Plants
- Seismic Restraints
- Steady State Vibration
- Nuclear Plants
- Refineries
- Structural Vibration
- Wind Loading
- Pulp and Paper Mills

WEAR™ Benefits

- Repeatable
- Environmentally Stable
- Low Structural Loading
- Dissipate Energy
- Wide Operating Temperature Range
- Proven Technology
- Simple Construction
- Corrosion Resistant
- High Cycle Fatigue Life
- No Maintenance

Environmental Conditions

Normal Temperature:	-40°F to 200°F/-40°C to 100°C
Faulted Temperature:	-40°F to 350°F/-40°C to 175°C
Humidity:	100% RH
Radiation:	1 x 10 ⁹ RAD
Pressure:	-14.7 psi to 100 psi 0 atm to 7 atm

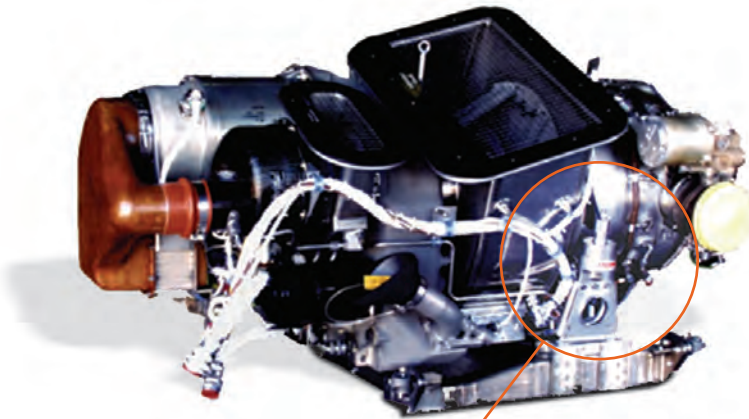


Captured every quarter loop, wire rope coil will not collapse; two-pitch design prevents twisting.



Wire Mesh Isolators

Wire mesh material can be manufactured in a multitude of shapes and sizes to accommodate your specific application. When exercised, the wire mesh damping elements convert input energy to heat. Friction is created when knitted or woven stainless steel wire strands are displaced relative to one another. Knitted metals have inherent resiliency and provide high-damping characteristics and non-linear spring rates.



Wire Mesh Isolator

Wire Mesh Isolator Features:

- Wide operating temperature range
- Long service life
- Environmental compatibility
- Maintenance-free operation
- Custom sizes and shapes available

Wire Mesh Isolator Typical Applications:

- Auxiliary Power Units
- Engines
- Communications Equipment
- Medical Equipment
- Sensitive Mobile Electronics

Material Development:

If your application parameters fall outside of the standard product line, you can be sure that Enidine has the engineering capabilities and resources to design, test and recommend a custom solution to suit your specific needs:

- 3D Modeling
- System Analysis (Modal, Linear/Non-Linear, Dynamic Analysis and Simulation, Finite Element, Shock and Vibration)
- In-house test facility for prototypes and production models: Static Load/Deflection, Life Cycle, Vibration Frequency, Dynamic Load, Random Input and High Frequency Noise
- AS-9100 Certified
- ISO 9001 Certified