



# Wire Technology

for Shock and Vibration



Solutions in Energy Absorption and Vibration Isolation.



An IMC Company

## WIRE ROPE ISOLATORS



**Enidine Wire Rope Isolators** protect valuable equipment by combating the harmful effects of shock and vibration. Their rugged all-metal design provides unsurpassed multi-axis isolation, requires no maintenance and is especially suited for harsh environments. Performance is unaffected by chemicals, oils, ozone, abrasives and temperature extremes. The smaller wire rope isolator series utilizes a special patented crimping process, making them especially reliable and cost-effective.

## COMPACT WIRE ROPE ISOLATORS



**Smaller than traditional Wire Rope Isolators**, these unique products provide simultaneous shock and vibration attenuation where sway and package space are a premium. Their symmetrical design provides consistent, multi-axis isolation and their small size permits isolation of individual system components, rather than the entire system. This creates a cost-effective shock and vibration solution.

## WIRE ROPE ISOLATOR ASSEMBLIES



**Special Wire Rope Isolator assemblies** are value added solutions designed to suit the needs of specific applications. If your application has special mounting considerations, Enidine can provide special adapter plates and other hardware to facilitate proper mounting. This ensures consistent shock and vibration attenuation in your application.

## WIRE MESH



**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.

## WEAR™



**WEAR™ Restraints** are wire rope isolators packaged in a linear configuration that accommodate movement due to thermal expansion and permit damped axial motion. They are designed to protect structures from steady state vibration, and restrain them from seismic and dynamic loads. Their unique design has eliminated the problems often associated with hydraulic or mechanical restraints, which are complex and prone to failure.

## CUSTOM PRODUCTS



**In addition to the expansive product line** highlighted above, Enidine has developed a wide variety of custom products to suit specific industrial, aerospace and defense applications. This often involves combining different technologies to provide a unique shock and vibration solution. For example, painting, special metals and elastomeric encapsulation are available. In addition, stiffness characteristics, winding, wrapping and mounting configurations can be modified to create a new design to your specification.

## APPLICATIONS



- Electronic Cabinets
- Shipboard Electronics
- Communications Equipment



- Disk Drives
- Medical Equipment
- Sensitive Mobile Electronics
- Small Pumps and Motors



- Shipping Containers
- Military Shelters
- Engines
- Reciprocating Equipment



- Auxiliary Power Units
- Engines
- Aircraft Avionics
- Communication Equipment



- Power Generating Plants
- Refineries
- Chemical Industry



- Defense
- Marine
- Navigation Systems

## A complement of capabilities surrounds Enidine Wire Technology products.

Enidine has a broad range of design and test capabilities that it leverages to the advantage of shock and vibration customers. With the broadest range of shock and vibration products available, many solutions can be found within our standard product portfolio. Wire technology products from Enidine have some unique capabilities:

- Wide operating temperature range
- Long service life
- Environmental compatibility
- Maintenance-free operation

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
- ISO 9001 Certified

## **Enidine Incorporated**

7 Centre Drive  
Orchard Park, New York 14127 • USA  
Phone: 716-662-1900  
Fax: 716-662-1909  
www.enidine.com

## **Subsidiaries and Affiliates:**

### **Enidine West**

184 Technology Dr., Suite 201  
Irvine, California 92618 • USA  
Phone: 949-727-9112  
Fax: 949-727-9107  
www.enidine.com

### **Enidine GmbH**

Rheinauenstr, 5  
79415 Bad Bellingen  
Rheinweiler • Germany  
Phone: 49 7635 8101 0  
Fax: 49 7635 8101 99  
www.enidine.de

### **Enidine Co. Ltd.**

398, Chigasaki-Cho, Tsuzuki-Ku  
Yokohama-Shi, Kanagawa 224-0031  
Japan  
Phone: 81 45 947 1671  
Fax: 81 45 945 3967  
www.enidine.co.jp

## **Enidine U.K. Ltd.**

Patrick Gregory Road  
Wolverhampton  
West Midlands, WV11 3DZ  
United Kingdom  
Phone: 44 1902 304000  
Fax: 44 1902 305676  
www.enidine.co.uk

## **Enidine Products**

Energy Absorption Devices • Stow Bin Actuators/Rate Controls • Air Springs  
Elastomeric Mounts • Wire Rope Isolators • Compact Wire Rope Isolators  
UltraLOC™ Seat Recline Controls • Gas Spring Replacements • Seismic Isolation Products  
Rotary Actuators/Dampers • Interior Noise Isolators

