

Your Critical Equipment  
Safely From Point A to B

Shock & Vibration Application Support for

Field Equipment  
Electronic Equipment  
Drones  
Weapons Containers  
Artwork Transportation  
Mobile Offices  
Mobile Laboratories  
Cleanroom Applications  
Research Labs  
Chip/Semiconductor Production

[www.isolator.com](http://www.isolator.com)

 **IDC**™ 50 Boeing Plaza  
Farmingdale, NY 11735



## the problem

A large effort went into designing your product, selling it to the customer, and then manufacturing it for shipment. Given the resources required to get a product to the shipment phase, it's important to take steps to ensure the product arrives at the customer in the same condition it left your facility. The consequences of damage during shipment will negatively impact your bottom line, but also your relationship with the customer.

For more sensitive, expensive equipment, damages incurred during material handling can result in long delays to a project, sometimes lasting weeks or months. Isolation Dynamics Corp. provides highly efficient wire rope assemblies and solutions to mitigate the risk of damage during transit through thoughtful engineering that has been proven from battlefield to oil field. Our products protect the world's most sensitive equipment.

# the solution

Wire rope isolators are an excellent solution for protecting your equipment for many reasons. The wire rope is a combined spring and damper, allowing for the creation of an efficient isolator that can isolate your equipment from damaging shock and vibration without occupying excessive space in your design envelope.

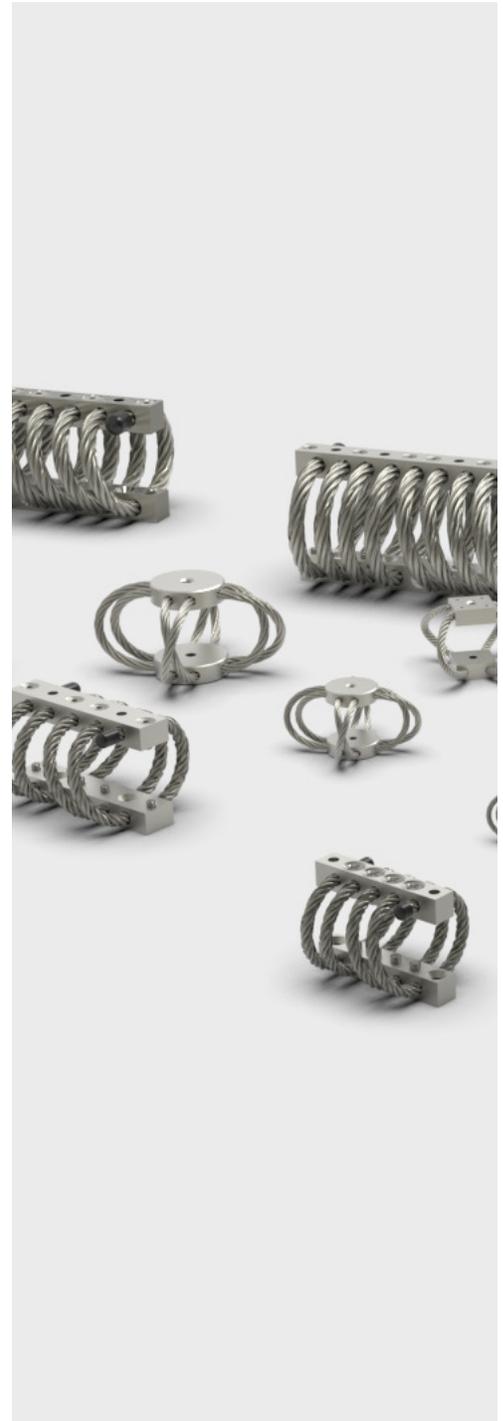
Due to its completely metallic design, wire rope can operate in extreme environments, withstanding ozone, oil, organic solvents, and other compounds that destroy elastomeric components. For projects with special requirements, the design is easily customizable, allowing for material or surface protection modifications to meet specific requirements for a project.

Cable isolators have multi-axis capability that will allow installation in almost any configuration, and are extremely easy to customize by adjusting the diameter of the cable, number of loops, height, width, etc..

Customizations are typically accommodated within the standard design, but some projects may require a unique design to incorporate the performance advantages of the wire rope isolator into their equipment assembly.

## benefits of wire rope isolation

- wider temperature range
- improved environmental resistance
- no outgassing
- multi-axis capability
- maintenance free
- long life & reliability
- compact design
- infinite customization
- low natural frequency
- high damping
- fail safe
- cost effective



**shock** sudden acceleration caused by impacts, drops, and impulses from external sources

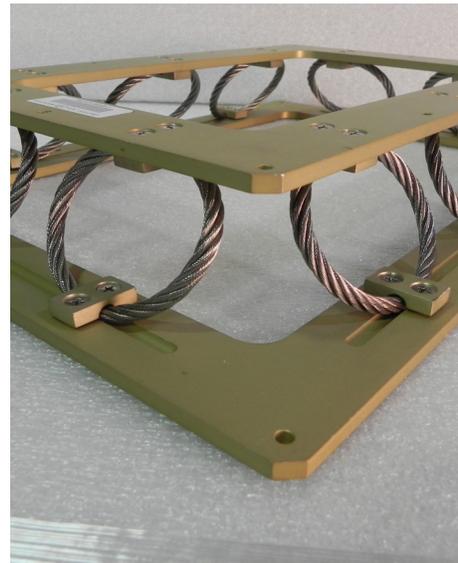
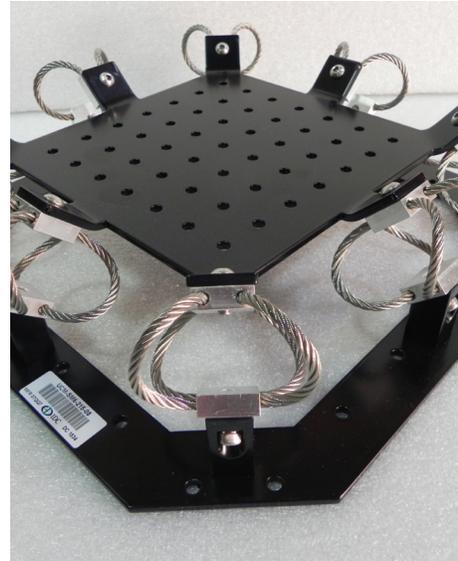
**vibration** oscillation about an equilibrium that could be transient, steady-state, or random in nature

# critical inputs for tailored assemblies

So you know you have a piece of equipment that requires shock and vibration protection, but where do you start?

You may not have considered the details of the input, the level of isolation required, or even how much sway space is available. Our engineers can discuss the method of mounting, and depending on the application requirements or equipment geometry, there may be mounting methods that are more advantageous than others.

For example, if your equipment is tall and narrow (such as a cabinet or enclosure), it may require a stabilizing mechanism. You may bypass stabilizers through stiffer isolators, but it will likely result in compromised isolator performance. Isolation Dynamics Corp. will ensure that you have all the information necessary to make the most educated decision for your application.



# rapid integration & design deployment

Combined with our engineering expertise, our manufacturing capabilities make us your best option for developing the optimal solution to your application problem. IDC can help you integrate isolators into your equipment.

The solution is often as simple as an assembly delivered with plates already mounted to either side of the isolator configuration for rapid installation, but can also be complex engineered fabrications for highly specified requirements to enable various isolator orientations, such as 45 degrees or in shear/roll.

We know that isolation is often considered in the very late stages of the project, and finding a readily available optimized solution is typically not easy.

IDC can provide the engineering services to design, validate, and produce these parts, providing you with an elegantly integrated solution that protects your sensitive equipment.

Isolation Dynamics Corp. is your partner for the best defense against shock and vibration, providing timely solutions to difficult problems in any environment.