

Compact Rope Solves Difficulty of Resonance Testing in Tight Spaces

Enidine Energy Absorption Application

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Product Overview

An international designer/manufacturer of CNC machine control systems had been utilizing rubber stud mounts to perform shock and vibration testing of their products. Unable to meet the required resonance testing specifications, the customer was searching for an isolator that would fit into tight spaces, allowing for 6 degrees of freedom and also satisfy the required resonance test. Responding to an advertisement in an electronics trade publication, the customer contacted ITT Enidine Inc. for help.



Product Solution

Given the specific requirements of the customer, ITT Enidine Inc. recommended CR2-300 Compact Rope Isolators (CR). This model offered high shock capacity and reduction of the vibration level to below the hard disk (HD) manufacturer specifications. Small in size, its unique bellmouth design provided the customer with their required 6 DOF while still maintaining the capacity to effectively meet the resonance testing. The CR2-300 also conforms to European Standards EN 60068-2-6 and EN 60068-2-27.

Application Opportunity

With the ITT Enidine Inc. CR solution, the customer was able to reduce the vibration levels by 75% on the HD drives without a failure after the shock test. This reduction will increase the lifetime of the equipment and the read/write capabilities of the drive itself. The implementation of the CR also enabled the customer to eliminate the need for an expensive redesign of the electronic housing. Satisfied with the results, the customer will use the CR products in all testing of HD drives in its computer systems. The CR2-300 Compact Rope can be used in many OEM applications within Electronic component markets where space constraints and vibration levels are a concern. They are a particularly good solution for applications with a combination of both shock and vibration.