

ITT Enidine Inc. Provides Solution for Future Combat System Program Enidine High Energy Rope Mount Isolators Application

By: Dave Snowberger

Application Overview

A major defense contractor for the US Army came to ITT Enidine Inc. looking for a shock and vibration solution for the Future Combat Systems (FCS) program. The application consisted of multiple electronics boxes mounted on the Non-Line of Sight Cannon (NLOS-C) vehicle. The NLOS-C is designed to be a long term replacement for the Paladin Howitzer, a 155mm self propelled artillery cannon. The isolation mounts were required to meet a limited envelope size, a maximum shock value of 30g, and have the ability to satisfy the requirements of a Nuclear, Biological, Chemical (NBC) wash-down.



Product Solution

ITT Enidine Inc. worked with the engineers on the FCS program to determine if the High Energy Rope Mount (HERM) isolators would be the best fit for the program. The HERM was recommended for the application because of its ability to attenuate both shock and vibration inputs. The HERM isolator offered a wider load range capability within a smaller envelope than the traditional wire rope isolator. Stiffness performance could be changed to meet the specific needs of the application by adjusting the durometer of the proprietary elastomer. HERM isolators also offer a higher load carrying and higher dampening capabilities than traditional wire rope isolators. The HERM isolator incorporates the traditional wire rope design encased in a proprietary elastomer that can be adjusted (thickness/density) as needed. Because the wire rope is encased in the elastomer, the NBC wash-down process is more effective than the typical wash-down process of a traditional wire rope product.

Application Opportunity

As a result of this application solution, the FCS team will incorporate ITT Enidine Inc. HERM mounts as the preferred choice to isolate shock and vibration problems of the electronics cabinets mounted in the NLOS-C and NLOS-M (Non-Line of Sight Mortar) vehicles. Applications requiring shock and vibration isolation within limited space constraints and that require easy wash-down will benefit from the HERM Series Isolation Mounts.

