

Engineering Partnership

Working with Our Hutchinson Partners to Identify the Right Isolation Strategy

A major defense OEM approached Hutchinson with a request asking to protect a device from a 5-foot drop. The device would be transported within a protective case, but how much energy would be transmitted through the case was unknown. The customer reached out to Hutchinson for our expertise in shock and vibration.

Technical Collaboration and Expert Analysis

Leveraging our vast experience and technical resources, Hutchinson's engineering team worked closely with the customer to characterize the shock environment and identify the right isolation strategy. To capture real-world data, Hutchinson loaned the customer a set of enDAQ mobile sensors from our sister division, Hutchinson Midé. The enDAQ sensor enabled the customer to run instrumented drop tests and capture high-fidelity shock data to determine exactly how much energy was transmitted through the case.



After processing and filtering the collected data using our in-house enDAQ software, Hutchinson analyzed the customer's system using our proprietary 6DOF software, "Barrysoft." Our team combined the payload properties, real-world shock data collected by the enDAQ sensor, and known performance of Hutchinson's shock isolators to determine the best solution. The analysis pointed to a combination of Hutchinson VHC 5A and VHC 7A isolators.

Payload Protection Pays Off

Thanks to Hutchinson's technical insight, rapid support and integrated resources across multiple divisions, the Hutchinson-designed isolation system allowed the payload to survive the demanding shock survivability requirements.

This successful customer collaboration is a testament to the value of pairing expert engineering with the right tools and data. As a result, Hutchinson won a large government contract and forged a mutually beneficial new partnership.

If you are interested in learning more about our capabilities or want to speak with us about your project, we'd love to connect.



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