

Automated Guided Vehicle (AGV) Utilizes Wire Rope Isolators to Protect Large LCD Glass from Shock and Vibration

Enidine Energy Absorption Application

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Product Overview

A Japanese manufacturer of material handling equipment (such as stacker cranes and AGV's) industry was searching for a solution to protect large pieces of LCD glass from shock and vibration during the manufacturing process. The current solution consisted of springs, viscous fluid and rubber which did not provide enough isolation for the glass during transportation. The customer contacted ITT Enidine Inc. for a solution.

Product Solution

ITT Enidine Inc. recommended mounting (4) WR16-600-8-DM Wire Rope Isolators to the base of the AGV. The superior isolation characteristics of the WRI decreased the shock and vibration levels of the AGV during transportation. Test results on the prototype AGV showed a reduction in peak G-force (shock transmitted to the products) by nearly 50% during movement and also simplified the installation method of the isolation system, when compared to the previous system. The customer was very satisfied with our solution and purchased additional units for their remaining AGV line.

Application Opportunity

With the increasing size of the LCD glass, manufacturers will need to apply additional isolation devices to their AGV's. These unique isolators provide unsurpassed multi-axis shock and vibration isolation with maximum reliability. With their corrosion resistant, all-metal construction, ITT Enidine Inc.'s Wire Rope Isolators provide the high performance best suited for these types of application.

