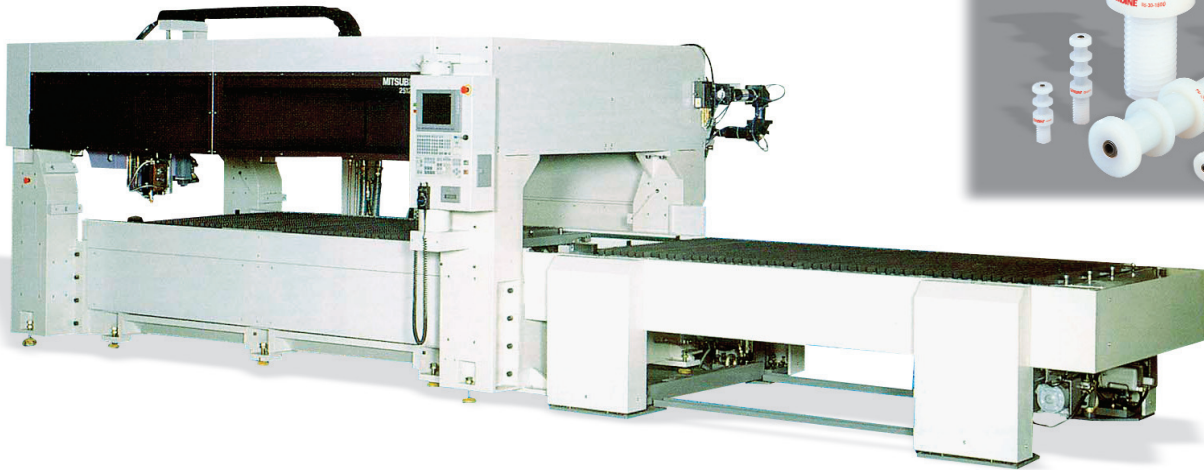


One-Shot Shock Absorbers Provide Affordable Emergency Stop for Laser Cutting Machines

Enidine Energy Absorption Application

By: Toshihiko Yanada



Product Overview

A Japan based manufacturer of electrical discharge and laser design cutting machines was searching for a more efficient and cost effective emergency stop solution. During the prototype stage of a laser cutting machine, the customer successfully tested the ITT Enidine Inc. PM1550 hydraulic shock absorber as a solution. Although this proved to be effective as an emergency stop solution, its implementation into the system would be too costly. A mechanical stop/rubber bumper combination was also tested due to its low cost but it produced unacceptable rebound.

Product Solution

ITT Enidine Inc. recommended our One-Shot shock products (OS-12-80 and OS-20-450) as a solution that would provide the customer with the results they were looking for. The customer carefully compared the rebound characteristics and cost differences between the hydraulic shock absorber and plastic deformation solution (One-Shot shock) and the existing rubber/bumper (competitor solution) products. Upon further evaluation, they found that when using the ITT Enidine Inc. One-Shot shocks the rebound characteristics and equipment protection was superior. When the One-Shot product was designed into the system, there was a 20% reduction in overall cost.

Application Opportunity

ITT Enidine Inc.'s One-Shot shock absorbers enabled the manufacturer to significantly reduce their cost and resolve their rebound problem. As a result of this application solution, the customer expects an increase in product sales. Many manufacturers are currently seeking inexpensive emergency stop solutions for their high-speed, linear motor driven machines. The ITT Enidine Inc. One-Shot shocks would be a safe and effective solution for any customer in the machine tools market.