

Protecting Image Quality of Film Processing Equipment

Enidine Shock Absorber Application

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Application Overview

A world leader in film processing equipment needed to protect the image quality produced by its newest machine. The machine uses a high-precision laser that scans images onto paper. Excessive force generated by the manual paper leading process often distorted the scanned image, by shifting the calibration of the laser. These issues prevented the manufacturer from introducing its machine onto the market.

Initially, the customer used a pneumatic device to control laser-scanning quality. However, the compressibility of air caused the damping to be inconsistent and ineffective. Having learned of ITT Enidine Inc. through our distribution network, the customer approached us for urgent assistance.



Product Solution

ITT Enidine Inc. determined that a low-range, LROEM 1.0 Platinum Series adjustable hydraulic shock absorber would meet the customer's unique requirements. Typically, manual loading processes generate low velocity and high drive forces. Choosing a Platinum Series LROEM adjustable shock absorber for low velocity applications (below 50 inches per second) allows for customized damping force when input parameters are not defined.

ITT Enidine Inc.'s Platinum Series LROEM contains a high viscosity fluid and unique orifice configuration that provide effective and consistent damping. A standard adjustable shock absorber exposed to these conditions would result in little or no damping, as the hydraulic fluid may bleed past the piston head, instead of through the orifices.

Application Opportunity

ITT Enidine Inc.'s Platinum Series LROEM 1.0 generated consistent damping, efficiently protecting image quality. The shock absorber became an important design component of the machine, and sales of the new processor have begun worldwide. The success of this solution has led the manufacturer to design several other ITT Enidine Inc. products into its machines.