Doubling Performance of an Automotive Stamping Operation
Enidine Shock Absorber Application
By: Greg Herman

Application Overview
An automotive industry parts manufacturer wanted to improve a critical stamping operation to keep up with increasing demand for automotive parts.

During the stamping process, sheet metal is brought to the press by conveyor. Once the sheet metal is in place, a die is mechanically pressed into the sheet metal, forming the intricately automotive parts. The stamping action causes the platform of the press to move downward. Nitrogen cylinders support the platform and return it to its original position after the stamping is complete. However, the cylinders return the platform with such force that the stamped parts bounce on the conveyor. The operation must wait for the bouncing to cease before it can continue. This affects the quality of the parts and prevents the manufacturer from running the machine at maximum capacity. The manufacturer required a method for deceleration of the return of the platform to its original position.

Product Solution
ITT Enidine Inc. recommended the installation of four CBOEM 4.0M x 2 shock absorbers, one at each corner of the stamping press, to dampen the return of the platform. As the nitrogen cylinders thrust the platform back to its original position, the four shock absorbers dampen the energy and decelerate the movement.

The solution enabled the manufacturer to double the output of the press without sacrificing the quality of the parts. The manufacturer considered the solution a complete success.

Application Opportunity
Automotive Stamping Plants (SIC 3465) are strong candidates for ITT Enidine Inc. shock absorbers. The machines are typically run at maximum capacity, accumulating more than 15 million cycles per year and providing a good opportunity for replacement business.