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Cost-Effective Tool Changer Machine Design

Enidine Energy Absorption Application

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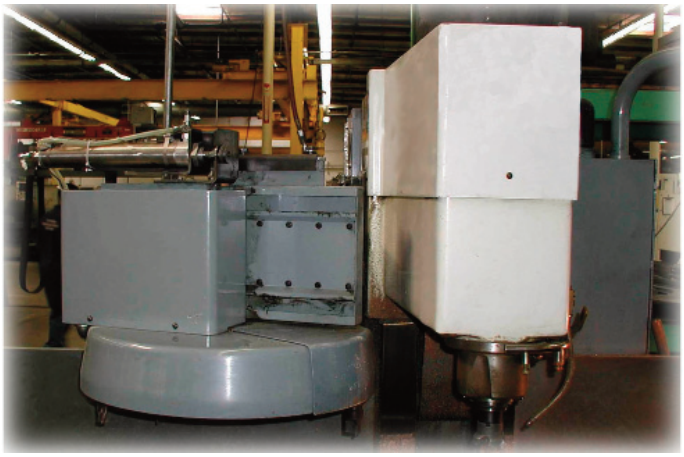
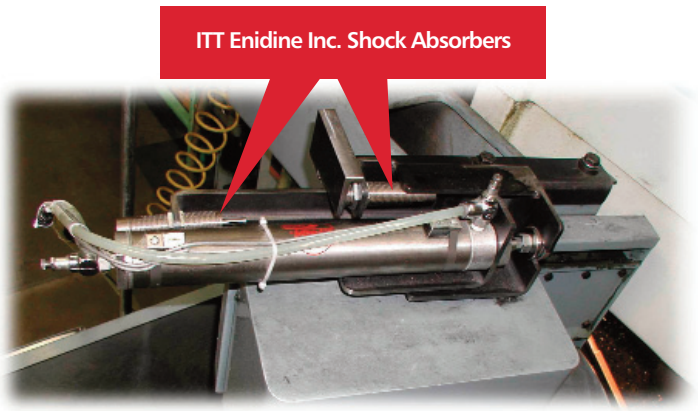
Product Overview

A California-based manufacturer of milling machines with automatic tool changers needed to find a cost-effective alternative to its existing servomotor-powered design. In order to become more competitive, the customer searched for alternative technologies that would match machine performance while reducing overall production costs.

The first attempted remedy from a pneumatic component manufacturer did not provide enough energy dampening to properly decelerate the tool changer. The customer approached ITT Enidine Inc. through a local distributor for assistance.





Product Solution

ITT Enidine Inc. engineers began a careful analysis of the exact nature of the application. It was determined that, with the simple extend/retract function of the tool changer, the use of a servomotor was expensive and unnecessary technology. Two PRO 100 IF-3 Platinum Series shock absorbers, mounted with a pneumatic actuator to dampen the extend/retract stroke during the tool change cycle, would provide a simplified design and reduced overall cost.

Application Opportunity

ITT Enidine Inc. Platinum Series shock absorbers are the integral component for automation of the milling machine tool changer, replacing the servomotor design. As a result, this Machine Tool manufacturer will maximize profitability and become more competitive. Because of the success with this ITT Enidine Inc. solution, the technology interchange will be integrated into other mills. Any machine tool manufacturer looking to increase efficiencies and improve overall costs would benefit from the use of this ITT Enidine Inc. technology.

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