New Stop Collar with Flange Accessory Reduces Downtime with Continuous, Repeatable Stop Positioning

Enidine Energy Absorption Application

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Product Overview

A Detroit-based automotive manufacturer needed to ensure the continuous performance of its production lines. Typical automotive manufacturing equipment designs, particularly weld robots and transfer stations, place significant emphasis on end-of-travel location. Without a definitive, repeatable stop position, follow-up processes cannot be completed until specific location sensors are triggered.

To provide the necessary stop, the customer utilized an ITT Enidine Inc. Stop Collar with an additional flange mounted onto the shock absorber. These separate components made up one complete assembly, whereas if a shock absorber needed to be removed, the stop collar would also require removal. This would eliminate the system’s positional stop and halt operation. Dissatisfied by costly downtime and decreased throughput presented by this scenario, the manufacturer contacted ITT Enidine Inc. for a pre-emptive solution.

Product Solution

As an enhancement to its current accessories offering, ITT Enidine Inc. designed a new Stop Collar with Flange. This is mounted directly onto the shock absorber, in similar fashion to the ITT Enidine Inc. Stop Collar, but provides a positional stop within one piece. Thus, machine operation can continue until a replacement shock absorber is available. While this situation may require temporary slowdown to prevent damage, equipment will still function properly and maintain consistent operation. Running at reduced speeds during a “worst-case scenario” is a much more productive and cost-effective alternative.

Application Opportunity

ITT Enidine Inc.’s new Stop Collar with Flange enabled the manufacturer to significantly increase the reliability of its automotive production process. With today’s tight time constraints and ambitious automotive production goals, shutting down a production line altogether can prove very expensive. In this particular application, equipment design costs were also reduced because external stops are no longer required.

As a result of this application, the customer has now implemented this stopping device in all possible locations, and ITT Enidine Inc. has a new accessory available to all customers. This product can be used in any industrial application where positional stops are critical to the continuance of machine operations, or where reduced machine design costs are desired.