

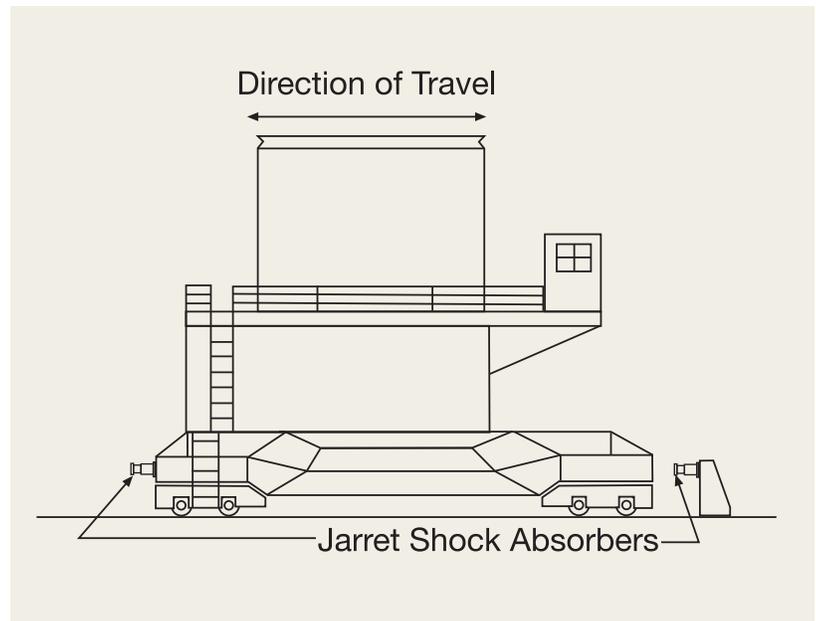
Coke Oven Larry Car Jarret Shock Absorber Application

Application Overview

The function of the Larry Car is to charge the coke ovens with coal. The car operates between the overhead coal-storage bin and the ovens on a track supported by the battery top. On the more modern cars, an automatic lid lifter is incorporated to eliminate manual removal of the charging-hole covers. Generally, there are two cars per track with only one in use at any given time.

Problem

There is a braking system to stop the car in the desired position. If the braking system fails or the operator over-travels the car, the car must be safely stopped overcoming both the momentum of the moving car and in some cases the driving force of the motor as well. The stop must be gentle enough to prevent damage to the car, end stop, other car or injury to the operator.



Product Solution

Jarret shock absorbers are ideal for this application because they provide full energy absorbing capability for power-on stops. Since the reaction of a Jarret shock absorber increases with stroke, they will not bottom out when the car is driven into them. As they are stroked, the reaction increases to overbalance the drive force of the car with enough remaining capacity to remove the kinetic energy, thereby assuring a gradual, shock-free stop, without reaching the end of the stroke, i.e. bottoming out.

In addition, the Jarret units will maintain full integrity of the seals (and therefore remain functional) when used in emergency stop applications, even if the shock absorber is not stroked for long periods of time. This differs from a hydraulic shock absorber whose seals will dry out and crack, thereby failing to maintain the pressure necessary for energy absorption if not stroked regularly to keep the seals moist.

An inventory of standard sizes provides ready availability for most applications. Factory repair is available to recondition worn units if required, thus assuring long economical service.