

Scrap Yard Crane Bridge and Trolley Bumpers Jarret Shock Absorber Application

Application Overview

The scrap yard crane is one of the hardest working cranes to be found. Not only is the crane required to work almost continuously, but it is frequently abused, especially when it is necessary for the scrap magnet to work outside the plan view of the runway, beyond the end of the runway or beyond the end of the crane bridge. To accomplish this, the crane operator will frequently run the crane bridge or trolley into the end-stops at speed while simultaneously releasing the magnet.

Problem

The crane bumpers often experience a full speed impact with a maximum "power-on" drive condition combined with the tension force in the crane magnet cable as the magnet is thrown into the scrap pile. The consequence of this combination of forces is that crane bumpers sized using conventional selection procedures will almost certainly be undersized and will not only give inadequate protection to the crane and runway structures, but will also result in short bumper life.

Product Solution

In order to adequately size bumpers for scrap yard cranes it is necessary to take into account the worst combination of forces that can be experienced by the bumpers and the maximum frequency of operation. Typically, the bumpers selected using these parameters will have twice the energy capacity of bumpers selected using normal selection procedures.

The Jarret units can be mounted on the bridge and trolley to impact against the end structure or they can be mounted on the end stop structure that the bridge or trolley impacts.

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.

