

Continuous Strip Process Line Looping Towers

Jarret Shock Absorber Application

Application Overview

Continuous strip process lines require the use of vertical or horizontal accumulator systems to allow material to be stored or drawn off when coils of material are being joined to allow the continuous processing operation to take place. In those process lines incorporating vertical accumulator towers, when the entry to the accumulator is stopped to allow welding of the strip, the upper frame of the accumulator is pulled down against a counter weight system by the downstream strip tension.

Problem

In the event that all the material stored in the accumulator is used up before the entry end welding process is complete, it is necessary to stop the down stream process. This is typically done by sensing the position of the upper frame of the accumulator so that the downstream drive is stopped before the upper frame impacts the lower frame. In the event of a malfunction of the position sensing device, the upper frame is driven into the lower frame or its support structure and can cause extensive damage.

Product Solution

The incorporation of Jarret elastomeric shock absorbers at the four corners of the lifting tower can smoothly decelerate the upper framework preventing damage. The unique characteristics of the Jarret elastomeric shock absorber allow the propelling force induced by the strip tension to be counterbalanced before the kinetic energy of the upper frame assembly is absorbed resulting in a smooth, progressive stop before the full stroke of the Jarret shock absorber is used up.

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.

