

Paper Making and Processing Machinery Jarret Shock Absorber Application

Application Overview

At the exit end of a paper machine, the newly made paper is rolled up on a mandrel that stays with the roll through the next processing step. When the roll reaches it's full size, the positioning stops retract and the mandrel rolls down a gradually sloping ramp into an end stop. This clears the area so another mandrel can be placed in position to form the next roll of paper. From the bottom of the ramp the full roll of paper is lifted off and moved to the next operation.

Problem

A full roll of paper can weigh 12 tons or more and when it rolls down the slope to the end stop it can develop substantial kinetic energy. The small rubber bumpers usually supplied on this machinery deteriorate rather quickly and the impact of the roll stopping against the rigid machine structure can cause cracks to develop in the welds of the frame structure and, ultimately, failure of the welds. This could allow the paper roll to fall from the end of the machine with possible injury to personnel or damage to adjacent machinery. In addition, because the sloping ramp is shallow, the roll of paper rolls quite slowly quite slowly thereby rendering most hydraulic shock absorbers useless due to their inability to accommodate low speed impacts.

Product Solution

The incorporation of Jarret elastomeric shock absorbers can smoothly decelerate the paper roll preventing damage to the machine structure.

The unique characteristics of the Jarret elastomeric shock absorber allow the propelling force of the rolls wight to be counterbalanced before the kinetic energy of the moving paper roll 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 (BC1F & Larger units), thus assuring long economical service.

