Slab Re-Heat Furnace End (Drop-Out Type)
Jarret Shock Absorber Application

Application Overview

With this type of re-heat furnace discharge, the heated slab is progressively moved through the furnace laterally and finally allowed to drop out of the exit end of the furnace, slide down an incline and onto the table rolls. To absorb the kinetic energy of the falling slab and properly position it onto the table rolls, a moveable bumping head device is used. With this type of bumping device, the energy of the falling slab is absorbed by the mass of the bumper and by a spring system travel mechanism so that the energy is absorbed and the slab is smoothly and accurately positioned on the table rolls.

Problem

With conventional bumper heads, the spring mechanism acts more as an energy storage device than an energy dissipation device and “fires” the slab back. As a consequence, the slab may not be properly located on the center of the table rolls and may also be placed on them at an angle. Also, springs bind and break and the bumper then becomes rigid. This condition transfers the impact loads into the structure and foundation damage and structural failures then occur.

Product Solution

The use of a Jarret elastomeric shock absorber in this application to replace the metallic springs results in the smooth deceleration of the slab and the accurate and consistent placement of the slab on the table rolls as the shock absorber gently returns the bumper to its original position.

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.