



Air Brake Makes Playground Safer

Challenge:

A manufacturer of playground equipment needed a way to differentiate their playground rail system from all the others on the market. Current designs use rubber bumpers at the end of the rails to cushion the stop, but the kinetic energy that these toys generate makes this rubber bumper little more than a noise reducer.

Solution:

Bimba designed a double ended, adjustable air shock that was compact enough to fit into the rail system and offered a long deceleration stroke to provide the safest design on the market. Bimba accomplished this by extending two independent piston rod assemblies using a centered spring inside of one cylinder body. The key design feature included a hollow, threaded shaft with a flow control to control the rate of exhaust, and therefore the rate of deceleration. The result was a controllable, long deceleration stroke.



Benefits:

- Short overall length, long deceleration stroke.
- Adjustable deceleration.
- Corrosion resistant design built for long life.

Other Applications:

- Packaging
- Conveyor Box Stop
- Diverter

