

## **INTRODUCTION**

Modern industrial applications where the bumper is installed primarily as an emergency stop are the intended applications for the 110 series bumpers. These devices bring the crane to a stop in a controlled manner. The long strokes minimize end forces on the building as well as on the crane.

## **PRINCIPLE OF OPERATION**

Upon impact, the plunger displaces oil through orifices in the metering tube, into the reservoir. The size and position of these orifices can be varied to suit different mass ranges. Plunger return is achieved by a gas spring recoil system. During production, the gas spring is inflated with nitrogen gas and sealed for the life of the bumper.

The bumper is designed with low static resistance. Under slow closure, the low resistance allows the shock absorber plunger to be driven in, thus maximizing runway approaches.

The shock absorbers can be supplied with options such as safety cables, bellows, low and high temperature seals, marine plating for outdoor use, to suit a range of requirements.

## **INSTALLATION METHODS**

Standard mounting methods include front flange mounting, front foot with rear flange and front and rear feet. The two smaller units can also be supplied with standard rear flanges.

In addition, special brackets can be supplied, based on a customer's needs, allowing for all sizes to be converted to rear mount or any other special mounting arrangement. These can be supplied fabricated and pre-assembled to the bumper. Please consult Gantrex for details.

# INSTALLATION DATA





