

Emergency Stop for Amusement Park Ride Enidine Heavy Duty Shock Absorber Application

By: Toshihiko Yanada

Application Overview

An international designer and manufacturer of amusement park rides based in Japan was looking for an emergency stop for the individual vehicles on their newest ride. Each vehicle had a front bumper with a shock absorber for emergency use. Their design goal was to reduce the deceleration G levels transmitted to the passengers in crash conditions to a 5 G maximum.

Product Solution

To meet the design goal, ITT Enidine Inc. recommended the HD 1.5 x 18, one of our heavy duty, large bore, hydraulic shock absorbers, having the energy capacity sufficient to meet the required reduction in G loading.

Since this was a new ride and a new application, the customer ordered a prototype unit to verify and validate the deceleration levels. The ITT Enidine Inc. HD test results met the G level target range. This ensured government approval, which was required to meet specified safety regulations. The customer was pleased with our solution and ordered production units.



Application Opportunity

ITT Enidine Inc. has many applications for its products in the amusement ride (SIC 7999) market, and can use this success to develop additional customers.