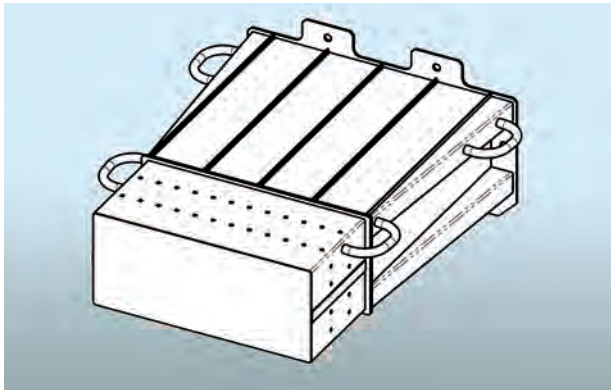


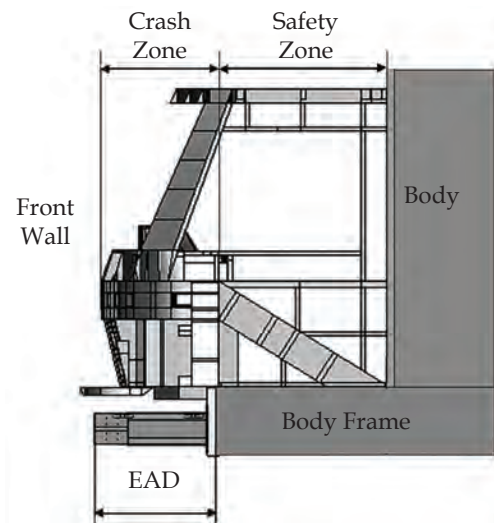
PASSIVE SAFETY SYSTEM FOR PASSENGER TRAINS



EAD configuration



EP20 locomotive with designed PSS



Locomotive driver cabin with PSS elements

Areas of Application

The passive safety system (PSS) is designed to protect the train passengers and crew and to minimize severe consequences of railroad accidents due to controllable deformation of the replaceable energy absorption devices (EAD) and the train crash zone

Specification

The use of PSS enables to ensure the train safety at a 36 km/h velocity of collision with similar train or with 80-ton freight train and at a 72 km/h velocity of collision with an obstacle lighter than 10 tons at the railway crossings. The PSS has a working stroke of 300–700 mm and an energy absorption capacity of 0.3–1.1 MJ for passenger carriages and locomotives

Stage of Development.
Suggestions for Commercialization

IRL9, TRL9
Simulation, design, and calculation of parameters for EAD and driver cabin, upon request

IPR Protection

IPR3

Advantages

There are no counterparts in Ukraine and in the countries using 1520 mm track gages. The use of PSS enables to ensure the train safety at a collision velocity up to 36 km/h

Contact Information

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