CRASH TECHNOLOGY

Our Solutions, Your Safety!

We are an expert in impact energy absorption for all types of rail vehicles. The buffers and CRASH elements offered by Axtone assure the safety of all the vehicles in railway transport, as well as their passengers and cargo.

Crash technology is a method of controlled transfer and absorption of great impact energy in the high-speed collision conditions.

It was developed to increase the level of passive safety in railway transport.

Our R&D Department designs individual solutions, creates passive protection of vehicles systems whose quality assures stable and reliable functioning.

The Crash Technology is applied in:

- Locomotives
- Passenger trains
- Subway
- Trams
- High-speed railway carriages
- Freight wagons

The application of the technology in certain types of railway vehicles is required by the regulations of law.

AXTONE

Crash Technology – Peeling

Innovative, patented by AXTONE CRASH technology means that the impact energy is absorbed through permanent deformation of a strip of steel cut from the buffer body, by changing mechanical energy into thermal energy.

During a collision, the outer surface of the buffer box is sheared by the shearing blades. The level of absorbed energy depends on the size and section surface area of the shearing band, which enables a wide-ranged adjustment of crash parameters to specific applications. The effectiveness of this innovative technology allows absorbing the energy in all railway applications.

Main Advantages of Crash Technology:

- Stability and repeatability of deformation force;
- Low level of deformation forces at high values of absorbed energy;
- Simplicity and wide range of changes of average deformation force and absorbed energy;
- Low mass crash absorber;
- Very high RESISTANT to non-axial impact;
- They are mounted in the same way as standard buffers;
- Possibility of using different shock absorbing systems of A and C category;
- Capability for further operation after a crash;
- Very large irreversible buffer strokes are available (of 1 m or more).;
- Installation of the crash absorber in front of the buffer beam if there is no room behind the beam or in front of the buffer beam with use the room behind the beam.

TRUST US!

Our solutions have been applied in the projects for the world's greatest manufacturers of passenger carriages and railway engines.

We provide all test, calculation and research reports for certification, as requested by Customers.

We look forward to working with you too!

Contact: