

Deformation- Elements, Collapse Tubes Energie- Absorber

Deformation- Elements are used to protect

- **passengers and**
- **vehicles as e.c. locomotives, passengercars....**

in case of impacts and crash with high velocities.

Situation of impact:

After the regenerative springs in the buffers or central couplers are complete deflected the non-regenerating- deformation element alter the available impact energie into deformation of tubes by travel and heat.



Advantages:

- High capacity, much more than the regenerative springs
- Short stop of the vehicle in the workshop- only for changing the elements
- Easy diagnose and inspection of frame and bogie situation
- Endforce does not depend from the velocity like hydraulic units
- Accurate start of deflection force- with low tolerances
- Deacceleration chooseable
- Indicates an impact with too much energy very clear to the employees
- Prevents from diagonal crash- a long travel for compensation is available
- Reduces the very high peakforce of hydraulic buffers