

Abstract:

Method for controlling an energy absorber (2) at a loading unit (100) in an overload event (63) and a loading unit (100), wherein the energy absorber (2) of the loading unit (100) absorbs energy in a single overload event. The energy absorber (2) acts between a receiving unit (101) for receiving objects (103) for transporting and a carrier device (102) for connection with a transporter (50). An absorber force of the energy absorber (2) can be influenced by means of an electrically controlled magnetic field unit (16).

Measurement values (17-20) of loads (80) acting on the loading unit (100) are captured sequentially by means of a sensor device (61).

An overload event (63) is determined if a measure (24) derived from the measurement values (17-20) exceeds a predetermined threshold value (65).

After the onset of an overload event (63) a prognosticated load curve (70) of the loading unit (100) is assessed from a multitude of measurement values (19-20) substantially captured from the onset of the overload event.

A planned power flow curve (71) for the magnetic field unit (16) is determined by way of which the prognosticated load curve (70) is dampened time-dependent so that a planned load curve ensues which remains beneath a predetermined load limit (66).

The power flow through the magnetic field unit (16) is controlled time-dependent by way of the planned power flow curve (71).

Fig. 6