

HOLDING DOWN DEVICE

Description

During the train passage, the wing rail respecttively the crossing block deflects elastically.

A hydraulic-mechanical holding down device is used to achieve an uniform deflection of the wing rail and the swing nose of the crossing during the train passage, thus avoiding relative movements and high dynamic loads in the transition area.

In the respective end position this holding down device presses the swing nose onto the sliding plates of the crossing via a cross beam. The contact force (approx. 70 kN) is generated mechanically via a disc spring package.

Prior to the switching process, a hydraulic cylinder arranged in the holding-down device presses the disc spring package together to such an extent that the cross beam is released and the swing nose can be moved. During this process the swing nose is not lifted up.



System advantages

- » Simple assembly without special tools
- » Reduction of dynamic loads in the transition area of the crossing
- » Additional protection against collision of the wheels with the swing nose tip



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Technical description

- » Holding down device consists of an electro-hydraulic drive unit and a hydraulic-mechanical holding down device NH145
- Delivery to installation site as main sub-assemblies (holding down device, drive unit, fastening items and a hydraulic connecting hose including protective hose)
- » Holding down device is attached to the wing rails of the frog



Assembled holding down device and opened drive unit

