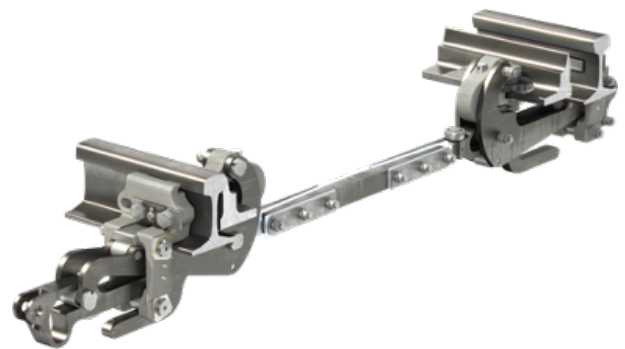


# HRS LOCKING DEVICE

## HRS locking devices for sets of switches and swing nose crossings of clothoid and circular turnouts

### Description

voestalpine BWG's turnout locking device ensures a secure locking between switch rail and stock rail or crossing block in relation to the wing rail of a turnout simultaneously holding down the switch rail or crossing block in closed position. The HRS locking device with its working principle lift-roll-lower/secure (German: Heben-Rollen-Senken/Sichern) can be used for all common rail profiles, both in the switch device and in the swing nose crossing.



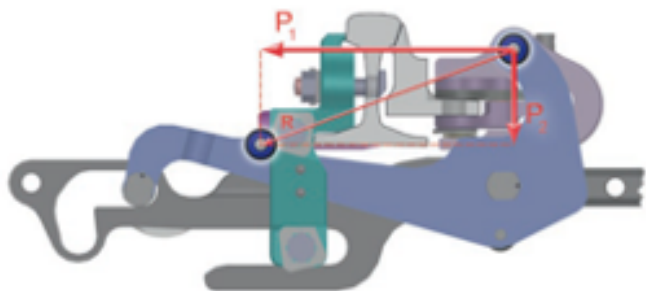
### System advantages

- » Usable for all common rail profiles in switch devices as well as in swing nose crossings
- » Proven standard in high-speed application and well-trying and known in all other fields of application
- » Modular design for easy and trouble-free retrofitting instead of clamp/pawl locks
- » Can be operated by various mechanical and electrical drives
- » Usable in ballasted tracks and slab tracks
- » Low maintenance due to permanently lubricated rollers
- » Significant extension of maintenance intervals

### Additional description

The design of the clamp allows the switch rail to be braced with the stock rail or crossing block with the wing rail in both, horizontal and vertical direction. This makes sure that the vertical position of the tip of the switch rail in relation to the stock rail or the crossing block to the wing rail remains the same even when the stock or wing rail are elastically deflected. The tip of the switch rail and the crossing block are protected and cannot be hit (by the wheel flange).

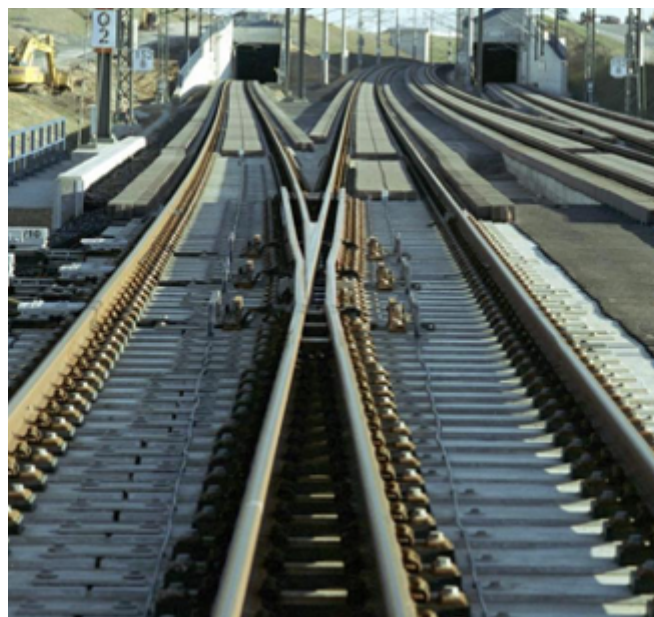
All movements are performed by low-maintenance rolls. There are no more sliding components that require intensive maintenance.



EW 60-10000/4000-1:39,173 fb with 6 HRS locking devices for sets of switches (NBS Köln-Rhein/Main, Breckenheim)

### Technical description

- » Unlocking, moving, and locking functions of the clamp are controlled via a special link block in the locking rod
- » The closed switch rail or crossing block are secured in horizontal and vertical direction
- » Pin point stretcher bar bracket BKL 80 allows for longitudinal movements of the switch rail in relation to the stock rail up to  $\pm 40$  mm
- » During the setting process: the switch rail is lifted up reducing the load from the switch rollers



EW 60-10000/4000-1:39,173 fb with 3 HRS locking devices for crossings (NBS Köln-Rhein/Main, Breckenheim)