

REPAIR SYSTEMS FOR WOODEN SLEEPERS

Excellent quality and servicing for extending the lifespan

Description

The rail world has been subject to change and innovation right from its inception. One of the major changes in recent years has been the transition from wooden sleepers to mainly concrete sleepers. Despite this major change, 50% of the rail infrastructure still uses wooden sleepers. Replacement of these sleepers is on one hand expensive and on the other hand time consuming. Often, they are replaced when one or more coach screw holes have been stripped.

This makes the track less stable because coach screws connect the rail/baseplate-system to the sleepers. In order to keep the track or turnout in optimal condition, two different systems are in use in voestalpine to restore overgrown/too loose coach screws. These systems considerably increases the life expectancy of wooden sleepers.

Benefits to the costumer

- » competent execution of repair measures of wooden sleepers
- » reduction of life-cycle costs
- » can be performed on rail tracks, turnouts and all other parts using wooden sleepers (bridges, rail expansion joints, ...)
- » 5-year guarantee on services performed
- » User-friendly
- » Very strong attachment
- » Durability extended until it needs definitive replacement





SERVICE DESCRIPTION

During the life time of turnouts it might be necessary to replace the wooden sleeper as the fixation from the coach screw to the sleeper is not functioning anymore.

Our wooden sleeper repair system is a suitable solution to repair these sleepers and extend their lifetime.

Before starting a site inspection is needed to inspect the condition of the sleepers. This is a visual check of the straightness and levelling of the turnout and the track. Furthermore detailed measurements have to be carried out – measuring the gauge and all important measures in the turnout according the checklist. Finally all results are documented.

In the area where the wooden sleeper repair is being carried out the track has to be stabilized with tie bars. During the repair work the turnout/track line can be used up to 50 km/h.

After removing the screw the screw hole must be drilled and the contamination must be removed. The height has to be adjusted with distance plates between the sleeper and plates.

The sleeper is now ready for creating the new thread.

Making a new thread

This system, is a sustainable solution because a completely new screw thread is formed for the coach screw. A very strong connection between the sleeper and the coach screw can be re-established.

Systems can be used:

- 1. Edilon glue in combination with a plastic thread (decentralized) Using this system will form a permanent connection between the plate, the screw and the sleeper. After finalizing the work the screw cannot be removed without destroying the connection.
- 2. Threadfix in combination with the "centralizer" This system uses the so called "centralizer" ensures equal filling around the screw coach to guarantee that it ends up exactly in the middle of the drilled hole, therefore, a very strong screw thread can then be made. The centralizer also ensures that the minimum and the maximum filling heights are clearly visible to prevent an overuse of Threadfix.

Owing to short traffic interruption times, the holes can be repaired within 15 minutes and trains can immediately pass over the repaired sleepers.

