



+ NEW +
environmentally friendly resin

SLS[®] Sersa Second Life System

// Cost-effective track and turnout rehabilitation

Cost-effective rehabilitation instead of costly renewal

// Heavily used track systems are subject to severe wear, particularly in turnouts, crossings and bridge timbers. The continuous loads acting on rails and turnout components during operation are transferred many times over to the ribbed baseplates and sleepers. The consequences are well known:

Impairments

Turnout sleepers deflect, ribbed baseplates work into the sleeper timber, sleeper screws lose their firm hold, ribbed baseplates shift horizontally, track gauge and check gauge change, wear on rails and turnout components accelerates, and ride comfort is impaired.

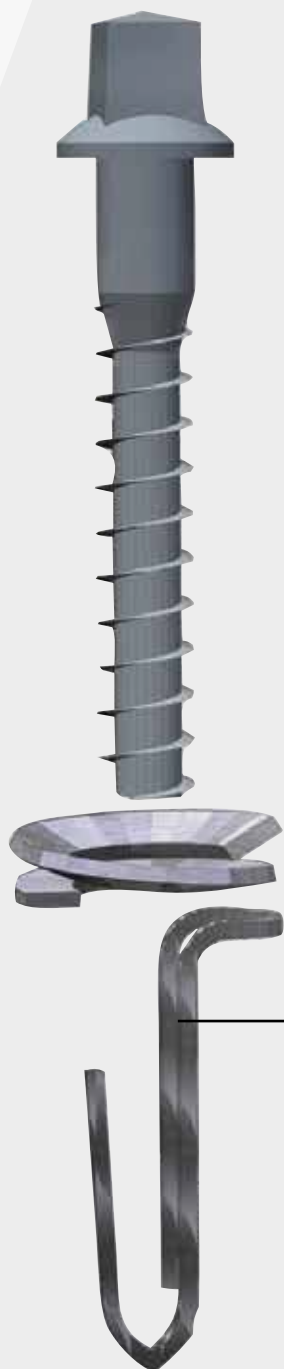


Our proven track record

Since the introduction of SLS® screw hole rehabilitation, several thousand turnouts, bridge timbers and track sleepers have been successfully rehabilitated in Switzerland, Germany, England, the Netherlands, Austria and Russia.

Expertise and solution

Timely maintenance, such as SLS® screw hole rehabilitation, is highly effective. Many years of experience with SLS® screw hole rehabilitation have continually inspired Rhomberg Sersa Rail Group to improve and further develop the system. The patented Rhomberg Sersa Rail Group method combines restoration of the sleeper screw's firm hold with restoration of track gauge and check gauge. This reduces further maintenance costs, avoids additional line closures and can extend the service life of track and turnout systems by 5 to 10 years when rehabilitation is carried out at the right time.



Our expansion insert ensures that the new sleeper screw sits firmly in the previously drilled-out and corrected screw hole. This enables reliable load transfer from the sleeper screw to the sleeper.

The solution for rehabilitating turnouts and tracks

// SLS® screw hole rehabilitation without line closures: installing insulated pushers and tensioners enables rapid gauge correction and allows trains to operate under signalling rules during rehabilitation at speeds of 30 to 50 km/h.



SLS® screw hole rehabilitation is the cost-effective rehabilitation solution for all track and turnout systems on timber sleepers. It is suitable for all turnout sizes and types as well as bridge timbers. Depending on the load, rehabilitation may be advisable after as little as 15 to 18 years.

A comprehensive condition assessment is required, based on the following criteria:

- Condition of the rails
- Condition of turnout components and bridge timbers
- Geometric deviation (track gauge, check gauge and height)
- Assessment of sleeper condition



A few steps to the desired result

// Rehabilitation is a complex process. Rails and turnout components should be replaced and welding work completed before SLS® screw hole rehabilitation is carried out.

Description

After correcting the track gauge and drilling out the screw hole (1), the expansion insert is fitted (2), resin is poured into the screw holes (3) and distributed evenly beneath the ribbed baseplates. Lupolen plates (4) are then inserted to restore the specified height. Finally, the new sleeper screws are driven in (5).

The rehabilitation work includes:

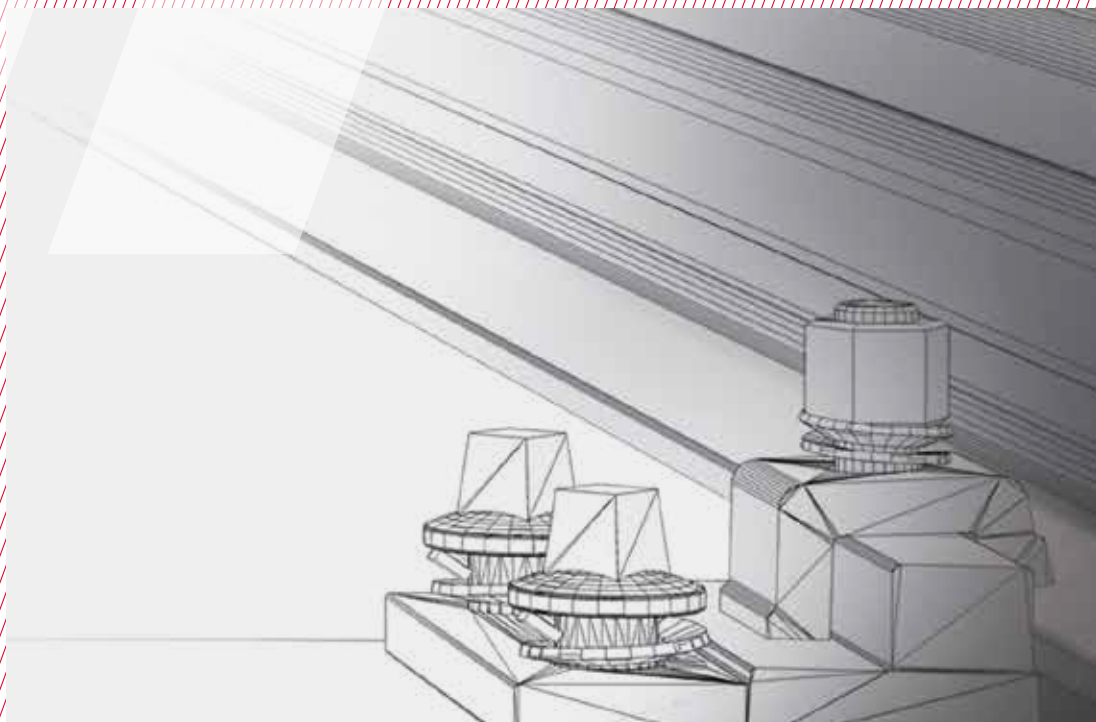
- Installing gauge bars and releasing one rail
- Correcting the track gauge
- Drilling out the screw or spike hole
- Fitting the expansion inserts and filling the screw or spike hole
- Inserting Lupolen plates for height correction
- Clamping the rail with new sleeper screws or spikes and spring washers



One method - many benefits

SLS® screw hole rehabilitation offers the following quality features:

- Restores the firm hold of the sleeper screw or sleeper spike
- Strengthens the support area beneath the ribbed baseplates
- Restores the correct track gauge and check gauge
- Corrects track cant
- Compensates for deflection of turnout sleepers
- Corrects the position of the ribbed baseplates
- Extends service life by 5 to 10 years
- Pays back the investment within 2 to 3 years





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