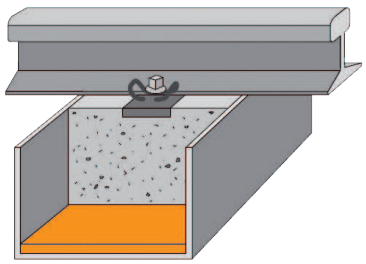
Elastic Bedded Turnouts on **Slab Track** using Sylomer® and Sylodyn® **Sleeper Boot Inserts**

Advantages:

- Smoother passage
- Increased safety and comfort
- Minimization of loads on rail seats and mountings
- Reduction of vibrations
- Reduction of Life Cycle Costs (LCC)

There are various construction designs for turnouts on slab track as well as various possibilities to ensure the desired characteristics in terms of elasticity. For designs featuring long sleepers, highly elastic insert strips of Sylomer® and Sylodyn® can be installed underneath the sleepers as so-called sleeper insert pads. Concrete is then poured around the sleepers which have been encased in this manner. Differences in the load bearing surfaces are caused by the different lengths of the sleepers used.

Getzner is able to smooth out the effects of these varying contact surfaces.



Design of the insert pads is carried out using Getzner's FEM method. Getzner provides its customers with sleeper insert strips tailored precisely to meet the specific needs, helping to improve the quality and durability of turnouts mounted on slab track.

We will be more than happy to assist you personally with any questions you may have on this subject.

Problem	Getzner solution
Due to the construction designs, there are different sizes of load bearing contact surfaces. If all of the elastic components have identical properties, this results in differences in subsidence when trains are passing.	Use of Sylomer® and Sylodyn® bearings with varying degrees of stiffness allows for the different contact surfaces and a various subsidence to be smoothed out, resulting in a homogeneous elastic bearing system for turnouts.
Large differences in subsidence cause dynamic shocks when trains are passing. This generates stresses on the rail seats and results in more wear and tear on the wheel-rail system and higher maintenance costs.	The optimized distribution of stiffness of the highly elastic Sylomer® and Sylodyn® insert strips improves the distribution of loads and reduces stresses on the rails seats. This, in turn, improves comfort and safety, while simultaneously lowering LCC.
The dynamic loads result in vibrations which are transmitted into the subgrade and into the structure as a whole.	The transmission of vibrations is reduced due to the insulation properties of the insert pads.