



# STRAIL<sup>®</sup>WAY

## THE POLYMER SLEEPER

Grey space has original track sleeper dimensions.



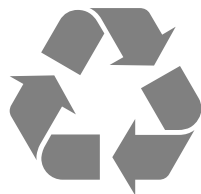
# THE POLYMER SLEEPER

## AT A GLANCE

Traditionally, railways use sleepers either made of wood, steel or concrete. Each material has its advantages and disadvantages. For some years now, however, polymer has been gaining in importance.

The basic material of **STRAILWAY** is fibre-reinforced polyolefin. Whether in urban environments, on dams and bridges, under turnouts or on open tracks, the durable **STRAILWAY** polymer sleepers are being used more and more often.

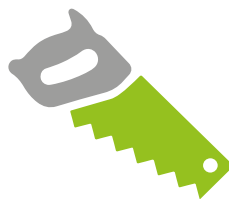
### ADVANTAGES AT A GLANCE



100% recycled and recyclable



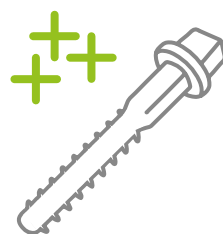
More than 50 years of service life



Can be processed using standard tools



Low carbon footprint



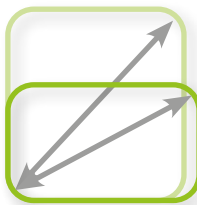
Better screw pull out forces than wood/concrete



Maximum axle load 22.5 t



Maximum speed 160 km/h



Main-track, turnout sleepers and bridge beams



Turnout - Germany



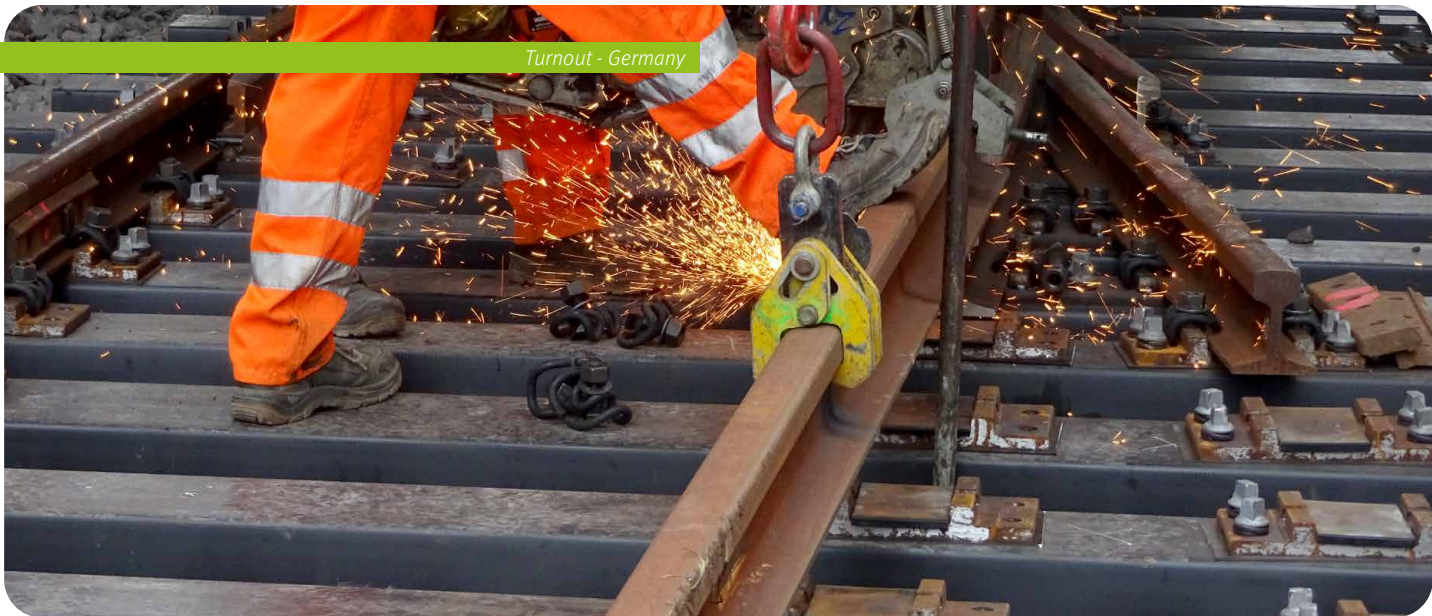
# THE POLYMER SLEEPER IS TESTED AND APPROVED

We aim to provide our customers with the best possible solutions at all times. We strive to be better than others when it comes to quality, product efficiency and service.

## EXTERNAL TESTS AT A GLANCE

THE polymer sleeper has successfully passed the serviceability test by German Railways at TU München!

Behaviour at different temperatures	Fatigue tests
Weathering resistance	System check in the ballast box
Behaviour in fire	Determination of electrical resistance
Screw pull out forces	3-point bending test
Impact stress test (simulated train derailment)	Examination of the exposure to hazardous materials during processing



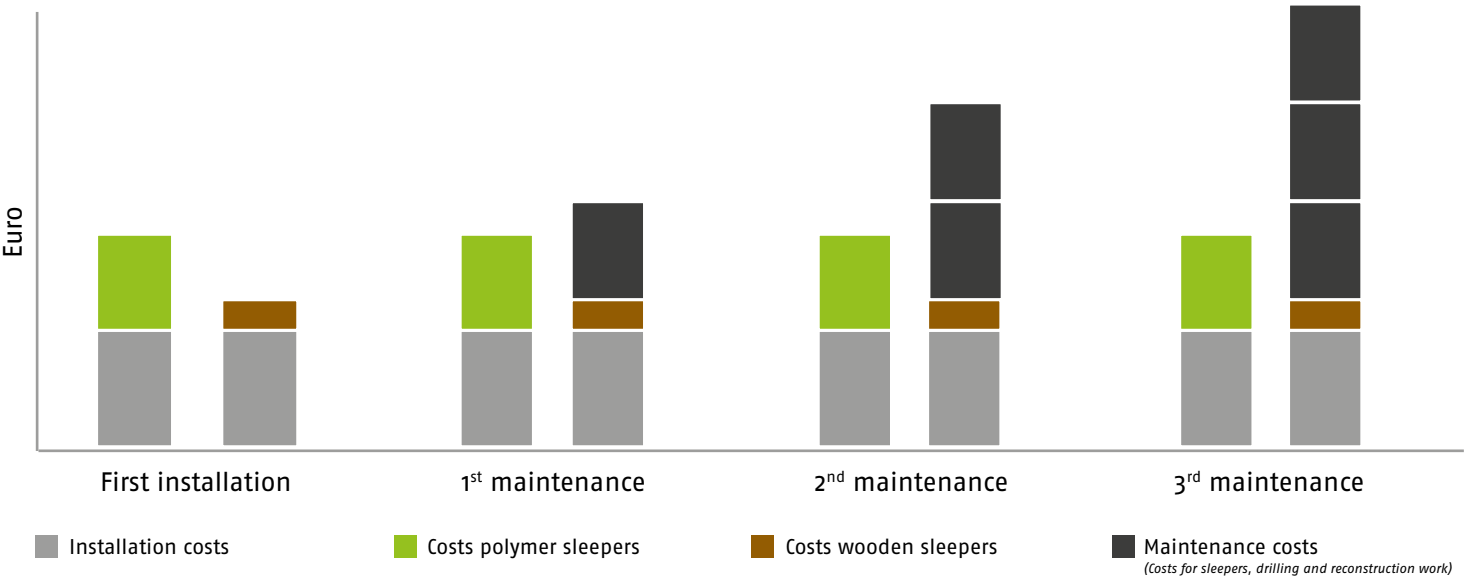
The polymer sleeper has not only withstood the demanding tests on our own test benches. It has also been tested by various external testing institutes. **All with successful results!**

# THE POLYMER SLEEPER IS ECONOMICAL

The service life of different sleeper types varies. Impregnating sleepers with tar oil derivatives might increase the service life of wooden sleepers but it does so at the expense of the environment. Concrete sleepers are not an alternative for all situations, e.g. they are too heavy for old bridges and unsuitable for shunting areas with a high derailment frequency due to the immediate total damage of the concrete sleepers.

**STRAILway is the perfect alternative** – the long service life of more than 50 years saves the costs for expensive reconstructions. A further advantage, especially for turnouts, is the „endless“ production process. Any desired sleeper length is possible.

## MODEL CALCULATION > 190 M SWITCH





# THE POLYMER SLEEPER IS ECOLOGICAL

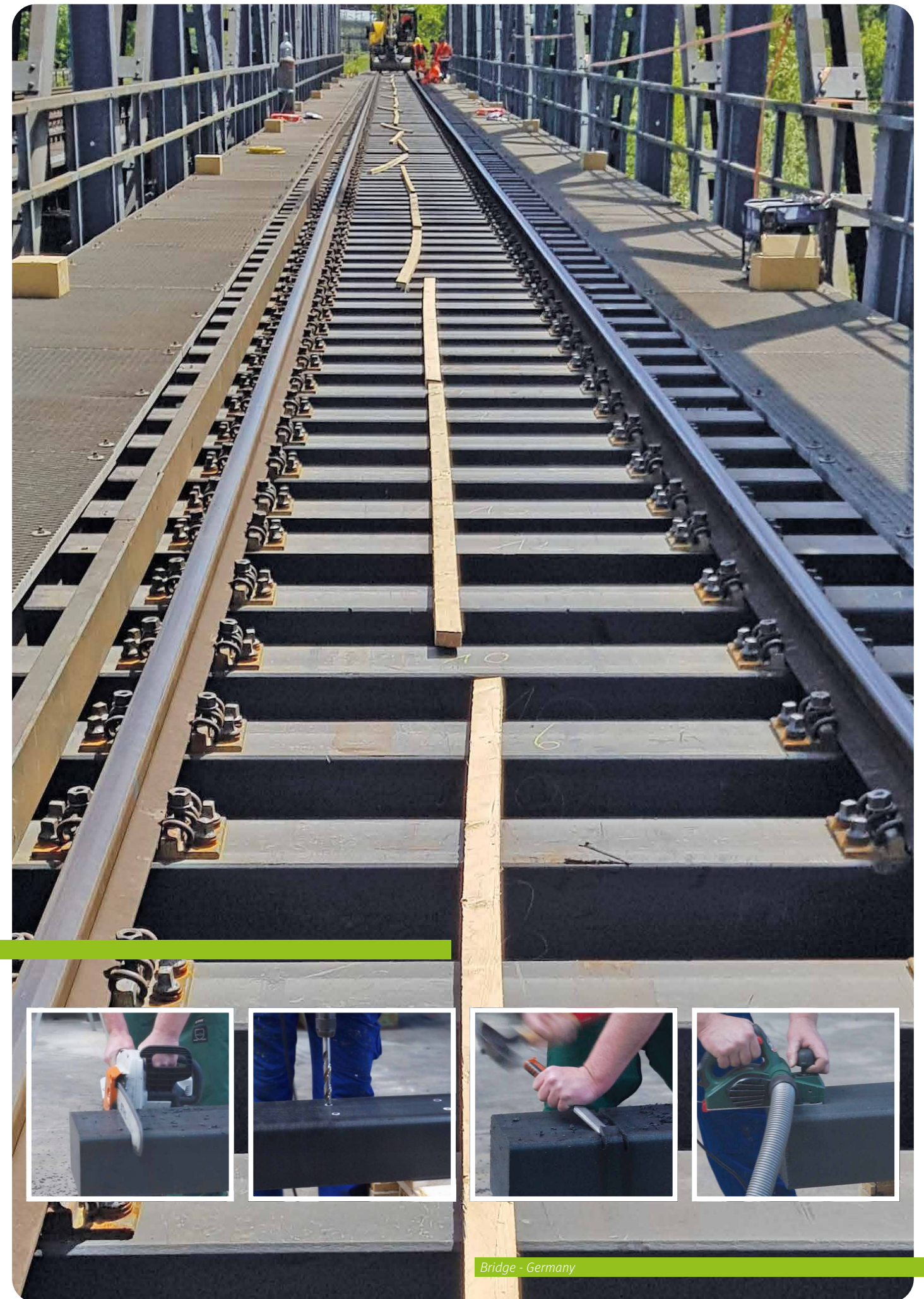
Environmental protection can go deeper and be more sustainable at the same time. Especially with wooden sleepers, there is the danger of impregnating agents lurking underneath the rails.

These can be problematic for the environment and health. In many cases they have already been banned.

**STRAILWAY polymer sleepers** do not contain these environmentally harmful substances.

Manufactured from a fibre-reinforced polyolefin recyclate compound, the sleepers consist of secondary raw materials and can also be recycled again to 100%.

This material makes them highly resistant to environmental influences and chemicals – and no contaminants are released into the environment.






# PARTNER OF RAILWAYS.

[www.strailway.com](http://www.strailway.com)

**KRAIBURG STRAIL® GmbH & Co. KG**  
**STRAIL | STRAILastic | STRAILway**

D-84529 Tittmoning | Goellstraße 8  
phone +49 (0) 8683 / 701-0 | [info@strail.com](mailto:info@strail.com)

Rev. 01/25.10.2019

STRAIL | STRAILastic | STRAILway are brands of the  group.

Grey space has original track sleeper dimensions.