

STRAIL[®]WAY

SLEEPER MADE OF POLYMER RECYCLATE.



strail
meets
railway.



POLYMER SLEEPERS *for highest demands.*

1 | APPLICATION

STRAILWAY > recycle polymer sleeper.

Traditionally, railways and undergrounds as well as tram lines and city railways drive on lines furnished with sleepers made of wood, steel or concrete. Every material has its advantages and disadvantages. The service life of the sleeper types is different, but always limited.

Wood has to be treated with chemicals, which is done by soaking it in creosote (tar oil waste product). That is why wooden sleepers will present a problem later on: Firstly, they release approx. up to two litre of the environmentally harmful creosote into nature. Secondly, it will be difficult to dispose of them. Therefore, there is in Europe the ambition to use alternative materials. Concrete sleepers cannot be used in all situations, e.g. they are too heavy to use for bridges and unsuitable for sections with a high frequency of shunting and a risk of immediate total loss. An alternative to wooden sleepers has been required for several years.

STRAIL® produces compact polymer sleepers which consist of secondary raw materials. Furthermore, the production process is uncomplicated.

The product is patented and after the bridge sleeper also the normal track sleepers have been approved for field testing by the EBA (Federal Railway Authority) in Germany (for axle loads of ≤ 225 kN and a speed of ≤ 160 km/h) also allows the substitution of wooden sleepers.

The basic material for the **STRAILWAY polymer sleeper** is extruded polymer recycle reinforced with fibres. Processible nearly like a wooden sleeper. The difference to other sleepers: No artificial resin, complex pultrusion techniques or specially produced parts such as steel reinforcements are used.

STRAILWAY is highly resistant against environmental influences and chemicals.

The **STRAILWAY polymer sleeper** has such a high resistance that the industrial customer BASF Chemical Park Schwarzheide uses them in the area of the filling system for sodium hydroxide.

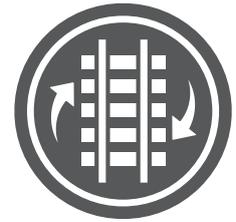
STRAILWAY -/ we think green.

Nothing changes for the sleeper production plant > the STRAILWAY polymer sleepers can be processed without changing the existing production lines.

The patented STRAILWAY polymer sleepers have achieved several approvals by the EBA (Federal Railway Office) for field testing.



2 | DATA



STRAILWAY – we think green.

Benefits

- ◆ good eco-balance due to the use of secondary raw materials
- ◆ does not pollute ground water
- ◆ recycling of operational residues > 100% recyclable
- ◆ Long service life
(simulated in the laboratory: more than 50 years > longer service life than wood/concrete > low life-cycle costs)
- ◆ processible nearly like wooden sleepers
(e.g. sawing, milling, planing, drilling, plating)
- ◆ treatment does not present any health risk
(test report available upon request)
- ◆ Screw pull out force better than with wood
- ◆ Excellent chemical and environmental resistance
(e.g. resistant to insects, fungi, moisture > no rotting)



www.strailway.de



STRAIL[®]WAY

made
in
germany

-/ Kunststoffschwellen / polymer sleepers

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