



NF21

Centre Pivot Liner

RAILKO Centre Pivot Liners (CPLs) are used to maintain friction within the centre bolster of the freight bogie.

Product Description

Tenmat's proprietary RAILKO NF21 is the only material specified in all types of freight wagons including coal hopper wagons, oil tankers, salt / silt / aggregate wagons, heavy duty wagons and tankers for hazardous chemicals. Tenmat's RAILKO CPL are recognised as the high-performing, long-lasting replacement for steel and plastic wear parts. Wagon owners specifically require RAILKO NF due to the added wear protection and extended maintenance cycles, while operators value the safety aspect of extremely durable NF material to avoid disastrous accidents.

Product Advantages

- Longer Service life - lower wear rate than other plastic based CPLs ensures less damage to a safety critical components
 - Approvals - Various approvals mean parts can be applied to wagons regardless of the borders that they pass through
 - Dimensional stability (Zero creep) - Stable and reliable material ensuring no requirement for later adjustments or replacements
 - Corrosion and Maintenance Free - No requirement for greasing as the material is self lubricating, meaning maintenance is only required when the CPL is ready to be replaced
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Approved Applications

Approved as a long-lasting CPL replacement for steel and thermoplastic alternatives.

Storage

- To be stored in a dry location
- Take care not to exceed safe working loads and heights for storage shelves and racks

Physical Properties

Property	Units	NF CPLs
Density	g/cm ³	1.64
Flexural Strength	MPa	45
Flexural Modulus	GPa	5
Compressive Strength	MPa	190
Charpy Impact Notched	kJ/m ²	60
Shear Strength	MPa	40
Compressive Yield @ 68.9 Mpa	%	2
Shore D Hardness		87
Swell in Water (24 hours)	%	
20 °C		0.2
80 °C		0.5
Coefficient of Thermal Expansion	x 10 ⁻⁶ /°C	43
Coefficient of Friction (Unlubricated)		0.34-0.42
Maximum Operating Temperature	°C	
Continuous		120
Intermittent		140
Normal Working Pressure	MPa	55



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Tenmat warrants the materials it produces will conform to Tenmat specifications and approved drawings where applicable. It is entirely the customer's responsibility to make the final product choice and satisfy themselves of the suitability of the product for the intended application, carrying out testing where required. For construction projects, all products which the customer is intending to use on a particular project must be approved in writing by the customer's building designer, system designer or design control professional, to ensure compliance with the latest regulations.

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