

TS – Separation & Filtration Nonwovens

TenCate Polyfelt® TS geotextiles are mechanically bonded continuous filament nonwovens made from 100 % UV stabilized polypropylene. They have been used for decades as separation and filtration elements in a large number of civil engineering applications.



TenCate Polyfelt® TS

TS-geotextiles stabilise base courses over subgrades with low bearing capacity

TS-geotextiles ensure the uniform thickness of the base course by preventing the ingress of fill material into the fine-grained subgrade. Installation damage is prevented by the outstanding puncture resistance. The high tensile strength of TS in longitudinal, transverse and diagonal direction provides additional stability to the structure.

TS-geotextiles maintain the permanent function of drainage systems

TS-geotextiles offer excellent filtration properties, characterized by high water permeability and optimum soil-retention capability, even under high mechanic and hydraulic stress. This ensures that the drainage gravel keeps its water flow capacity, thus providing quick and efficient drainage of the soil.

TS-geotextiles are robust and long-lasting

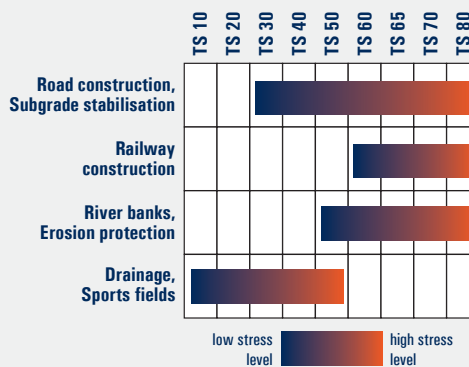
The manufacturing method (a continuous process with endless filaments) guarantees the use of high-quality raw materials. TS is resistant to all chemical and biological media usually occurring in soils and construction materials. It cannot be dissolved by water and therefore is harmless to ground water. TS-geotextiles are equipped with a UV-stabilizer, providing extended resistance to direct sunlight.

Service is a part of quality

Thanks to a worldwide network of subsidiaries and trading partners TS-geotextiles are quickly available. Standard grades can be delivered promptly. For technical questions an experienced team of experts is at your service.

TS-geotextile grade selection

The grade selection chart below gives just a rough guidance. For a detailed design please contact our technical staff, or use our special design software. Obtain your free copy of the TenCate design CD by emailing the relevant sales office overleaf, or use our special design software on our homepage www.tencate.com/geosynthetics.



The advantages at a glance:

- Stabilizes base courses over low bearing capacity subgrades
- Maintains the function of drainage systems
- High long-term resistance and robustness
- Technical support by TenCate Service Team

Applications

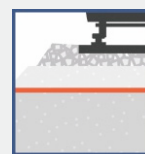
Unpaved roads



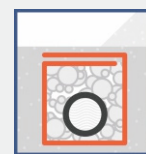
Road construction



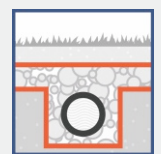
Railway construction



Drainage trenches



Area drainage e.g. sports fields



TS – Separation & Filtration Nonwovens – Technical Data

Properties [Standard]	Unit	TS 10 (4.01)	TS 20 (4.01)	TS 30 (4.01)	TS 40	TS 50	TS 60	TS 65	TS 70	TS 80	
Mechanical Properties											
Tensile strength <small>[EN ISO 10319]</small>	MD	kN/m	8	10	12	14	16	20	22	25	29
	CD	kN/m	8	10	12	14	16	20	22	25	30
Elongation at max. load <small>[EN ISO 10319]</small>	MD	%	90	90	90	95	95	95	95	95	95
	CD	%	75	75	75	46	46	46	46	46	46
Energy value <small>[EN ISO 10319]</small>	(MD+CD)/2	kJ/m ²	3.5	4.3	5.0	5.8	6.2	8.0	9.0	10.5	12.5
Static puncture resistance (CBR-Test) <small>[EN ISO 12236]</small>		N	1240	1500	1800	2100	2350	3050	3350	3850	4400
Cone drop test (hole-Ø) <small>[EN ISO 13433]</small>		mm	26	24	20	24	22	19	17	15	13
Hydraulic Properties											
Permeability vertical <small>[EN ISO 11058] (Δh = 50 mm)</small>		l/m ² s (mm/s)	140	125	105	125	115	90	85	80	75
Opening size O ₉₀ <small>[EN ISO 12956]</small>		µm	130	115	100	100	100	95	95	90	90
Identification Properties											
Thickness <small>[EN ISO 9863-1]</small>	2 kPa	mm	0.8	0.9	1.2	1.8	1.9	2.4	2.5	2.9	3.3
Mass per unit area <small>[EN ISO 9864]</small>		g/m ²	105	125	155	180	200	260	285	325	385
Forms of supply											
Width		m	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4
Length		m	300	250	225	200	175	135	125	100	90

The values given are average values obtained in our laboratories and in testing institutes. The right is reserved to make changes without notice at any time.

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Quality - Environment
ISO 9001
ISO 14001
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TenCate Geosynthetics Austria Gesm.b.H, TenCate Geosynthetics France S.A.S and TenCate Geosynthetics Netherlands b.v. are certified for the design, manufacturing and sales of geotextile and geotextile related products.