

TECHNICAL DATA SHEET

UPM Conifer TCF

TCF Bleached Northern Softwood Kraft Pulp
Pulp mill: UPM Pietarsaari

Date of issue: 12.6.2017

PULP CHARACTERISTICS

	Typical value	Spec
Brightness, ISO % ISO 2470-1	87,5	≥ 85
Impurities, mm ² /kg ISO 5350	2	
Extractives, % SCAN-CM 49:93	0,04	≤ 0,15
Ash content, % ISO 1762	0,2	≤ 0,3
pH ISO 6588	6	5,0-7,0

FIBRE CHARACTERISTICS

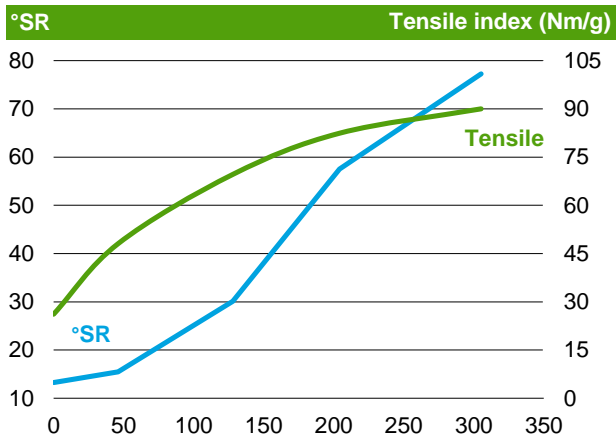
	Typical value
Fibre length, mm Metso FS5	1,9
Coarseness, mg/m Metso FS5	0,15

RAW MATERIAL

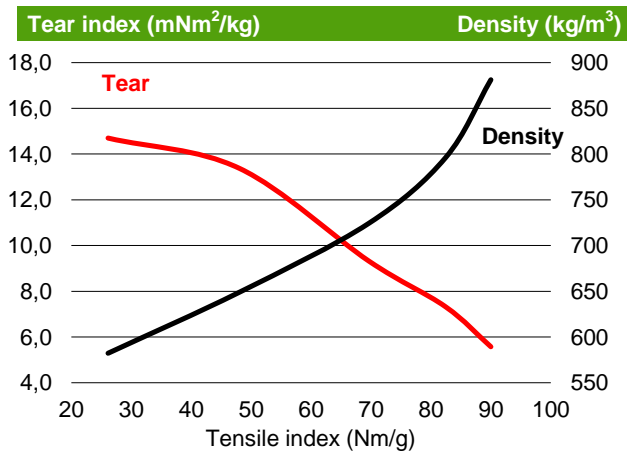
Softwood

Pine (*Pinus Silvestris*), Spruce (*Picea Abies*)

REFINABILITY



TEAR AND DENSITY AT TENSILE



Specific Refining Energy	CSF	SR number	Tensile index	Stiffness index	Tear index	Scott Bond	Density	Opacity	Air res.
kWh/t	ml		Nm/g	Nm/g	mNm ² /g	J/m ²	kg/m ³	%	s
0	690	13	26	3,9	14,7	102	582	73,2	1,6
46	634	16	48	5,8	13,4	251	649	69,0	2,8
128	399	30	70	7,4	9,3	553	724	65,1	34
204	188	58	82	8,5	7,3	1117	796	61,9	570
305	52	77	90	8,7	5,6	1614	881	53,9	19000
53	613	17	50	5,9	13,0	279	656	68,7	5,6
129	395	30	70	7,4	9,3	558	726	65,0	34
305	52	77	90	8,7	5,6	1614	881	53,9	19000
71	561	20	55	6,3	12,1	344	672	67,8	12,3
99	481	25	62	6,8	10,7	447	698	66,5	23
128	400	30	70	7,4	9,3	550	724	65,1	31
93	500	24	60	6,7	11,1	423	692	66,8	20
128	400	30	70	7,4	9,3	551	724	65,1	34
164	300	43	76	7,9	8,4	816	758	63,6	284

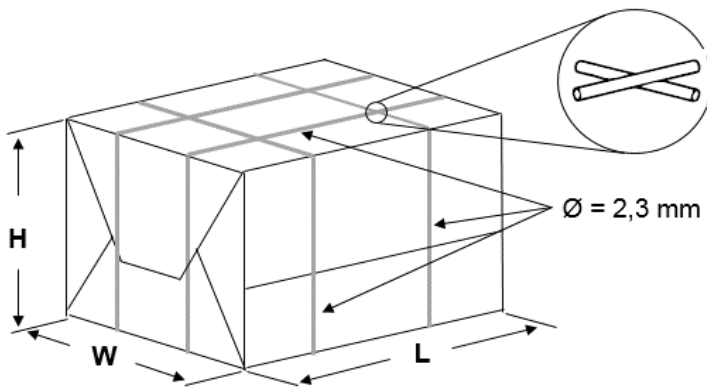
Typical values are averages from all mill quality control samples during 2016. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. Specific Edge Load 2,5 J/m, ISO testing methods (H 50%, 23 °C, 60 gr/m² sheets).

UPM Conifer TCF

Bale marking

	UPM Conifer TCF	NBSK	
	8 L	54504	FIN
	Mill No	Product	Lot No

Standard bale



Sheets

Size:	84 x 73 cm
Grammage:	850 g/m ²

Standard bale

Size:	L = 88 cm
	W = 76 cm
	H = 40 cm

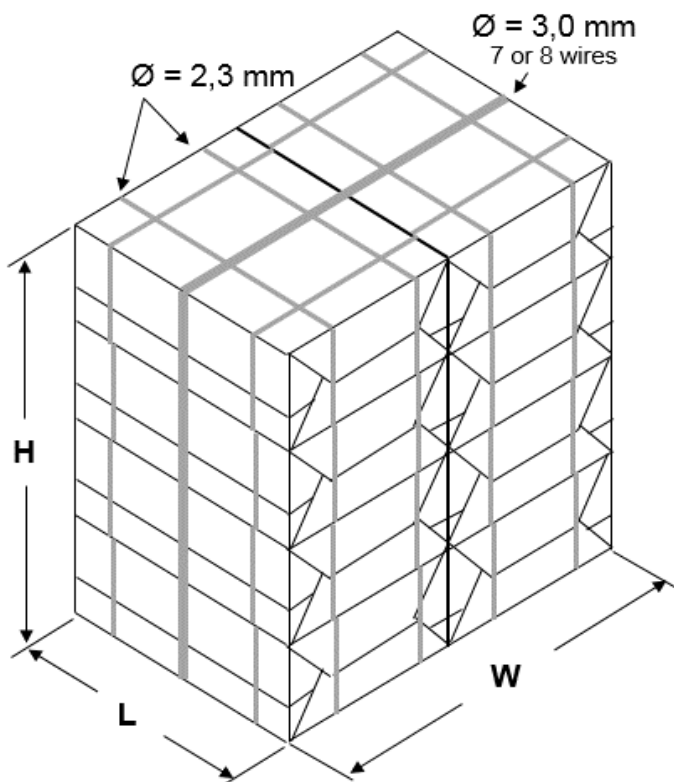
Weight: 250 kg

Wrapping: Pulp sheets (unwrapped on demand)

Markings: Blue watersoluble inkjet printing.
Country, company name, product code and bale number on both sides.

Wires: 4 galvanized wires, diameter 2,3 mm.

Standard bale unit configuration



Standard bale unit configuration

Standard bale units

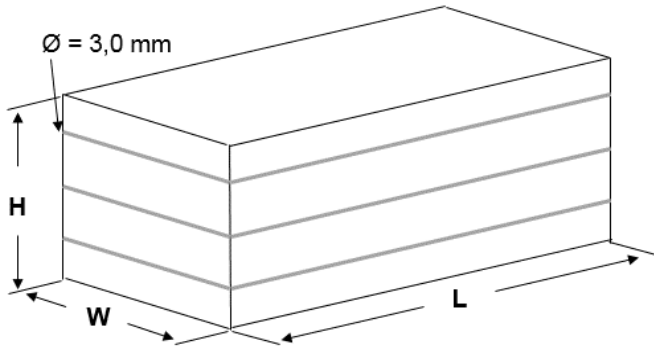
Size:	L = 88 cm
	W = 152 cm
	H = 160cm

Weight: 2000 kg (8 x 250 kg)

Wires: 7 or 8 galvanized wires, diameter 3,0 mm

UPM Conifer TCF

Big bale



Sheets

Size: 84 x 73 cm

Grammage: 850 g/m²

Big bale

Size: L = 160 cm

W = 86 cm

H = 75cm

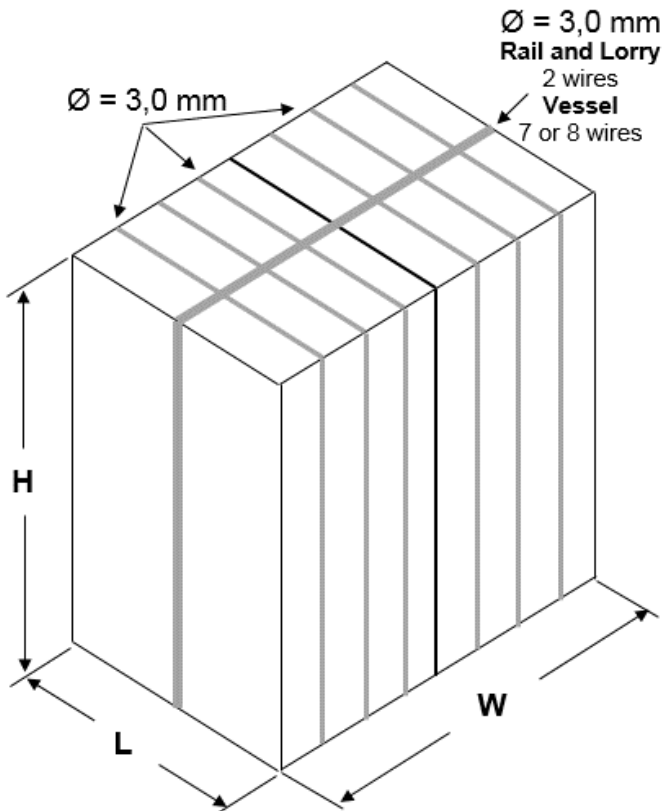
Weight: 1000 kg

Wrapping: No wrapping

Markings: Blue watersoluble inkjet printing.
Country, company name, product code and bale number on both sides.

Wires: 3 galvanized wires,
diameter 3,0 mm

Big bale unit configuration



Big bale unit configuration

Big bale units

Size: L = 86 cm

W = 150 cm

H = 160cm

Weight: 2000 kg (2 x 1000 kg)

Wires: Vessel 7 or 8 galvanized wires, Rail and Lorry 2 wires
diameter 3,0 mm