

TECHNICAL DATA SHEET

UPM Conifer Reinforcement

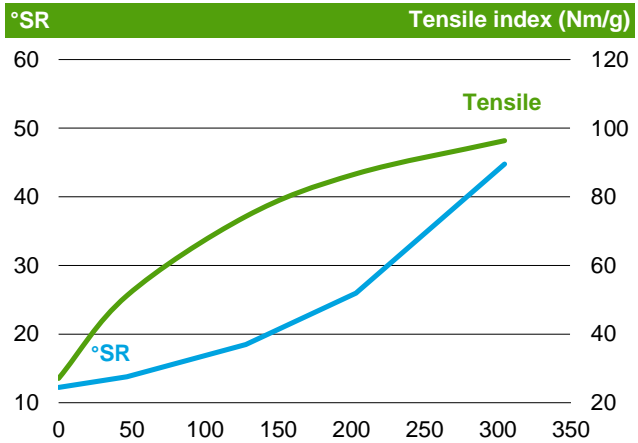
ECF Bleached Northern Softwood Kraft Pulp
Pulp mill: UPM Kaukas

Date of issue: 08.04.2019

PULP CHARACTERISTICS

	Typical value	Spec
Brightness, ISO % ISO 2470-1	88	≥ 86
Impurities, mm ² /kg ISO 5350	4	
Extractives, % SCAN-CM 49:93	0,05	≤ 0,15
Ash content, % ISO 1762	0,2	≤ 0,2
pH ISO 6588	5,6	5,0-7,0

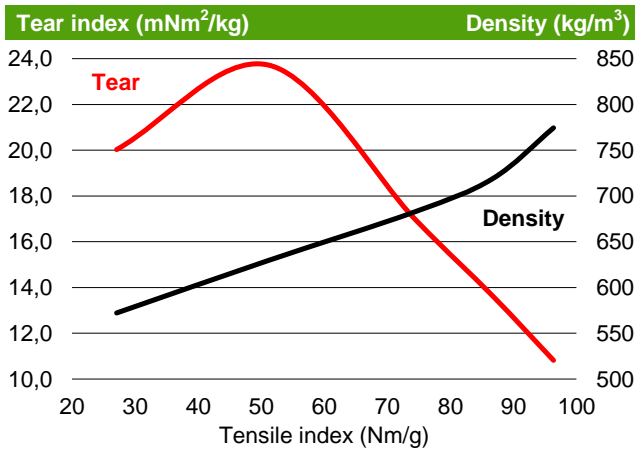
REFINABILITY



FIBRE CHARACTERISTICS

	Typical value
Fibre length, mm Metso FS5	2,34
Coarseness, mg/m Metso FS5	0,16

TEAR AND DENSITY AT TENSILE



RAW MATERIAL

Softwood

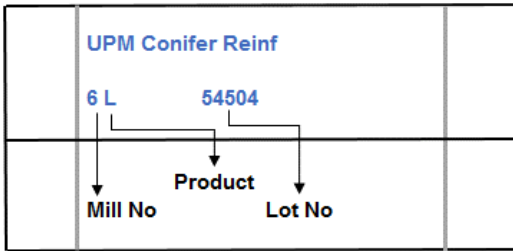
Pine (*Pinus Silvestris*), Spruce (*Picea Abies*)

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	720	12	27	3,8	20,0	123	572	71,1	1,4
47	693	14	51	5,8	23,7	233	630	67,6	1,8
128	589	19	74	7,4	17,0	411	682	64,5	6,8
203	442	26	87	8,3	13,6	623	719	62,3	46
305	238	45	96	9,0	10,8	902	774	60,0	807
44	694	14	50	5,7	23,5	228	627	67,8	1,8
113	608	18	70	7,1	18,3	378	673	65,1	6
238	373	32	90	8,5	12,7	718	738	61,5	306
143	560	20	77	7,6	16,3	454	690	64,1	15
193	461	25	85	8,1	14,1	596	714	62,6	41
225	398	30	89	8,4	13,0	683	731	61,8	209

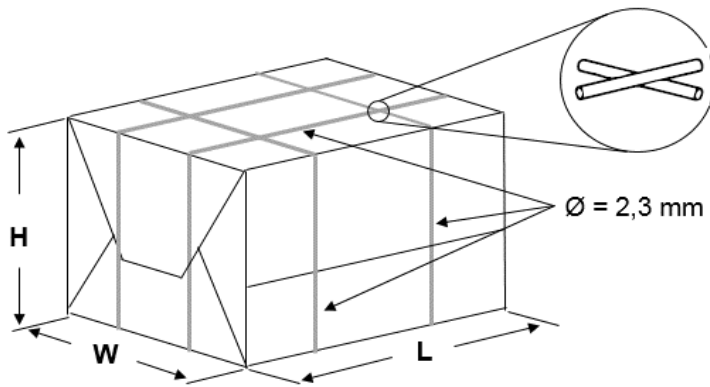
Typical values are averages from all mill quality control samples during 2018. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. Specific Edge Load 2,5 J/m, ISO testing methods (H 50%, 23 °C, 60 gr/m² sheets).

UPM Conifer Reinforcement

Bale marking



Standard bale



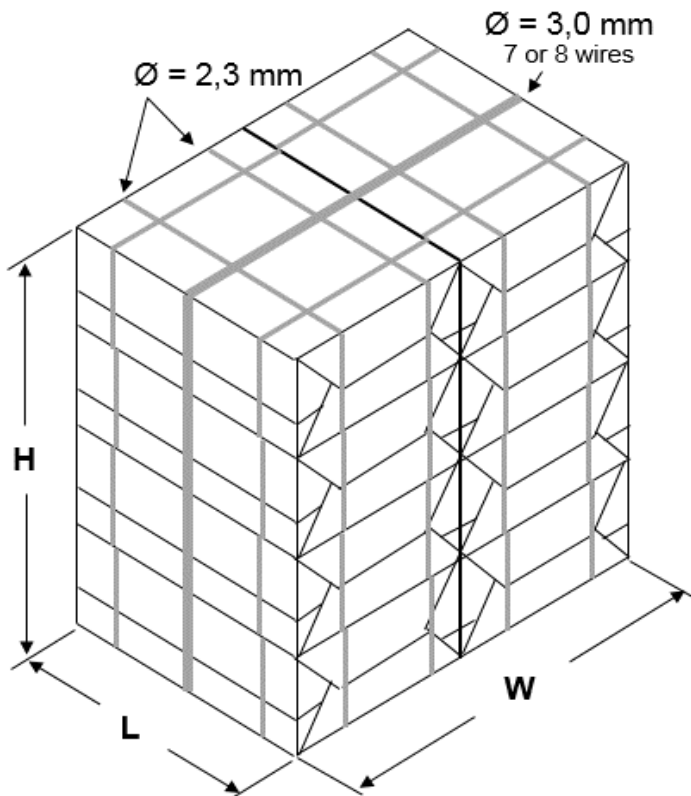
Sheets

Size:	85 x 70 cm
Grammage:	1000 g/m ²

Standard bale

Size:	L = 89 cm
	W = 73 cm
	H = 43,5 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



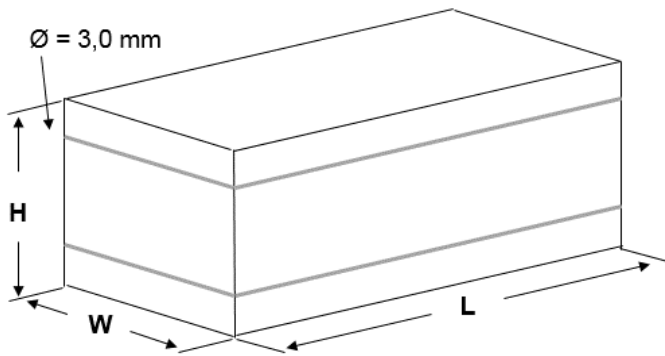
Standard bale unit configuration

Standard bale units

Size:	L = 89 cm
	W = 146 cm
	H = 175cm
Weight:	2000 kg (8 x 250 kg)
Wires:	7 or 8 galvanized wires, diameter 3,0 mm

UPM Conifer Reinforcement

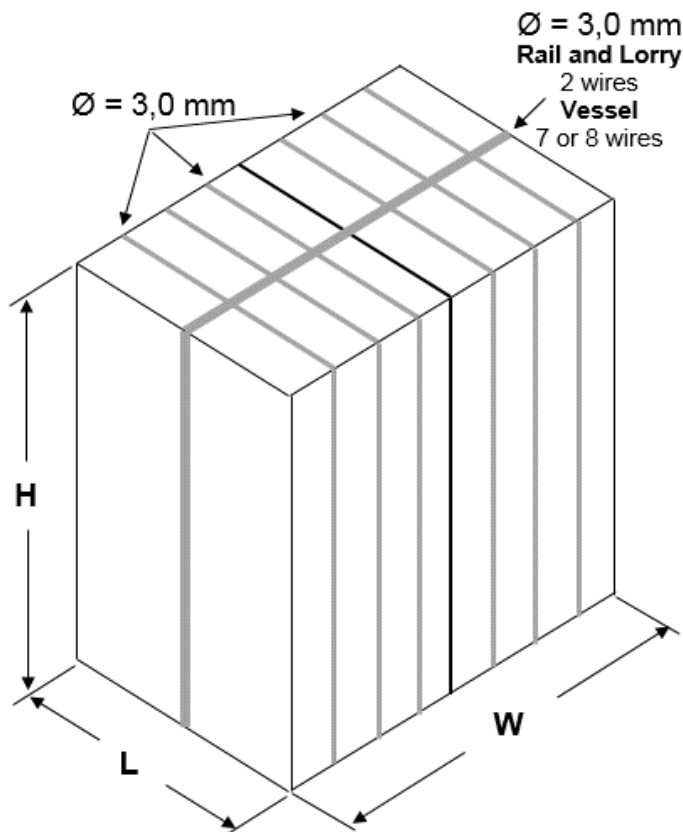
Big bale



Sheets	
Size:	85 x 70 cm
Grammage:	1000 g/m ²

Big bale	
Size:	L = 175 cm W = 87 cm H = 72cm
Weight:	1000 kg
Wrapping:	No wrapping
Markings:	BLUE watersoluble inkjet printing. Country, company name, product code and bale number on both sides.
Wires:	2 galvanized wires, diameter 3,0 mm

Big bale unit configuration



Big bale unit configuration	
Big bale units	
Size:	L = 87 cm W = 144 cm H = 175cm
Weight:	2000 kg (2 x 1000 kg)
Wires:	Vessel 7 or 8 galvanized wires, Rail and Lorry 2 wires diameter 3,0 mm



UPM-Kymmene Corporation
Alvar Aallon katu 1
PO Box 380
FI-00101 Helsinki, Finland

Contact information:
Niklas Keskinen Senior Product Manager, tel. +358 40 585 2781
niklas.keskinen@upm.com
www.upmpulp.com