

TECHNICAL DATA SHEET

UPM Betula

ECF Bleached Birch Kraft Pulp

Pulp mill: UPM Pietarsaari

Date of issue: 12.6.2017

PULP CHARACTERISTICS

	Typical value	Spec
Brightness, ISO % ISO 2470-1	89	≥ 88
Impurities, mm ² /kg ISO 5350	2	
Extractives, % SCAN-CM 49:93	0,2	≤ 0,4
Ash content, % ISO 1762	0,5	≤ 0,7
pH ISO 6588	6	5,0-7,0

FIBRE CHARACTERISTICS

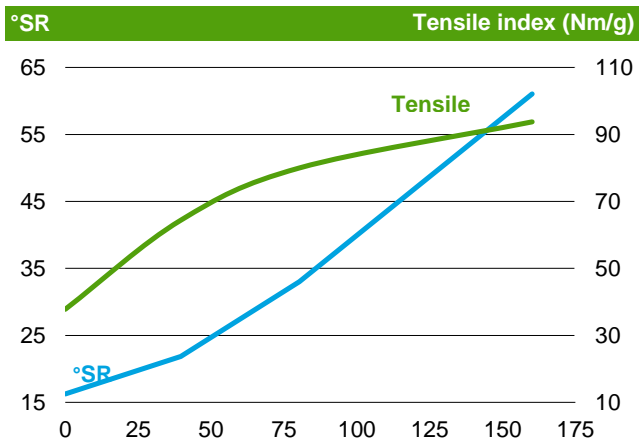
	Typical value
Fibre length, mm Metso FS5	1,0
Coarseness, mg/m Metso FS5	0,08

RAW MATERIAL

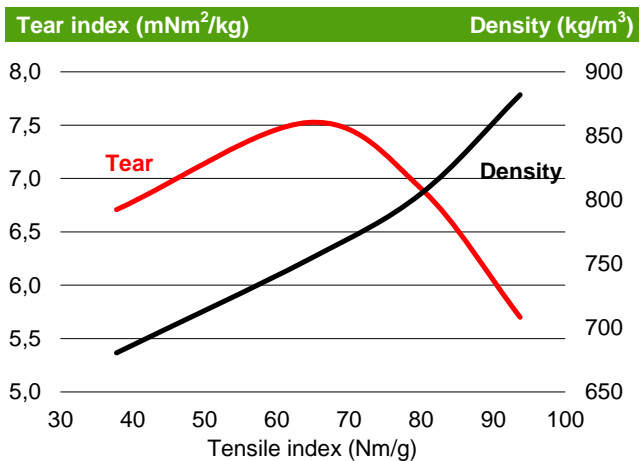
Hardwood

Birch, Aspen and Sawdust

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	575	16	38	5,6	6,7	173	681	73,1	3,7
40	476	22	64	7,4	7,5	405	753	68,9	13
80	338	33	80	8,2	6,9	698	805	65,8	71
160	133	61	94	9,0	5,7	1594	882	58,7	2121
3	567	17	40	5,7	6,8	192	687	72,7	4,4
33	492	21	60	7,1	7,4	367	741	69,6	11
80	337	33	80	8,2	6,9	700	805	65,8	73
27	509	20	56	6,8	7,3	329	729	70,3	9,7
51	437	25	69	7,6	7,4	488	768	68,0	29
69	375	30	76	8,0	7,1	620	791	66,6	55
30	500	20	58	6,9	7,3	349	736	69,9	10
62	400	28	73	7,8	7,2	566	781	67,2	45
11	549	18	45	6,1	6,9	235	700	72,0	6

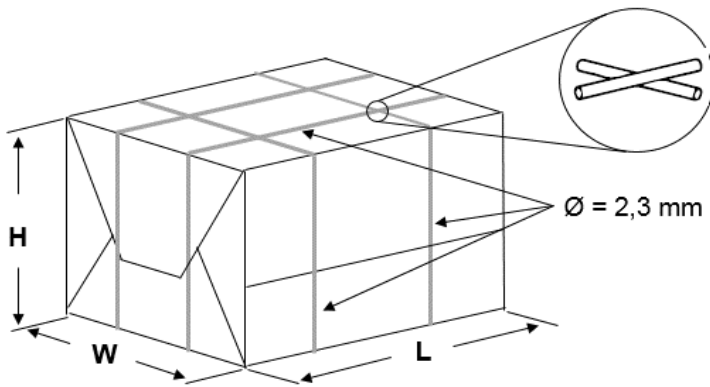
Typical values are averages from all mill quality control samples during 2016. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. Specific Edge Load 0,5 J/m, ISO testing methods (H 50%, 23 °C, 60 gr/m² sheets).

UPM Betula Pietarsaari

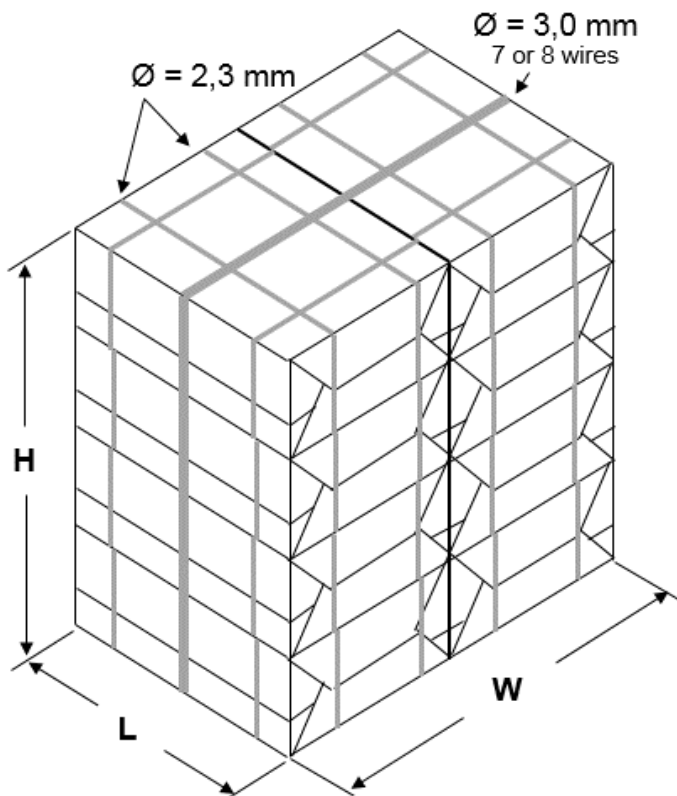
Bale marking

UPM Betula	BHKP
8 B	54504
FIN	
Mill No	Product Lot No

Standard bale



Standard bale unit configuration



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: Red 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 units

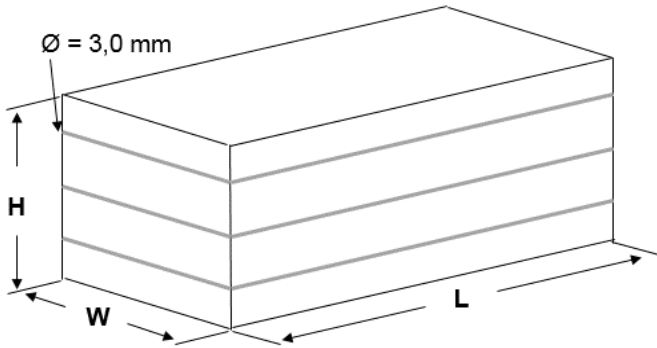
Size:	L = 88 cm
	W = 152 cm
	H = 160cm

Weight: 2000 kg (2 x 1000 kg)

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

UPM Betula Pietarsaari

Big bale



Sheets

Size:	84 x 73 cm
Grammage:	850 g/m ²

Big bale

Size:	L =	160 cm
	W =	86 cm
	H =	75cm

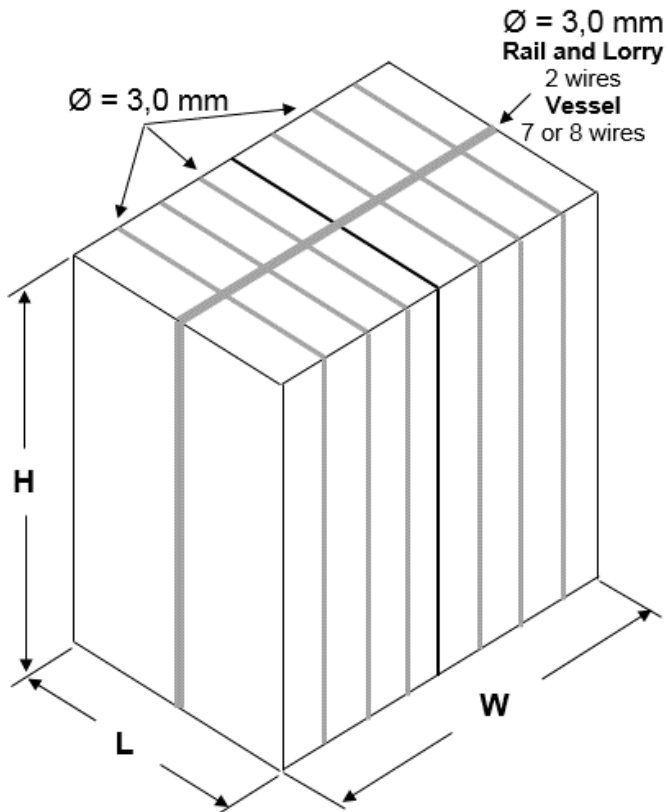
Weight: 1000 kg

Wrapping: No wrapping

Markings: Red 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 (8 x 250 kg)

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



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