

TECHNICAL DATA SHEET

UPM Betula

ECF Bleached Birch Kraft Pulp

Pulp mill: UPM Kymi

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	0,1	≤ 0,4
Ash content, % ISO 1762	0,2	≤ 0,5
pH ISO 6588	6	5,0-7,0

FIBRE CHARACTERISTICS

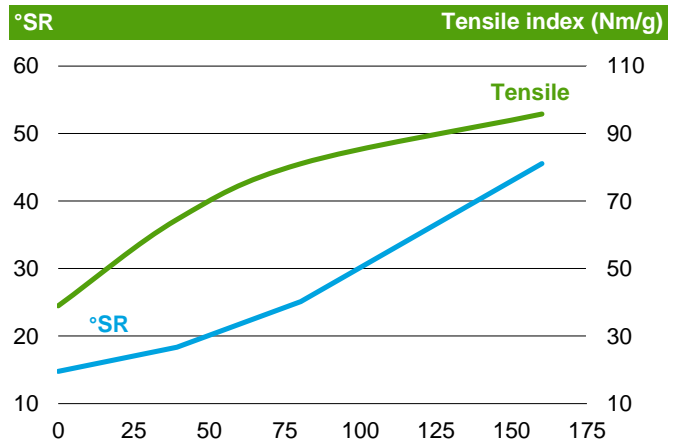
	Typical value
Fibre length, mm Metso FS5	1,1
Coarseness, mg/m Metso FS5	0,07

RAW MATERIAL

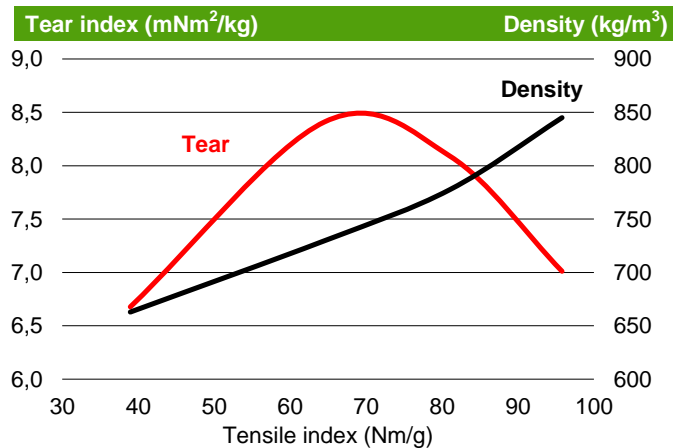
Hardwood

Birch, Aspen and Sawdust

REFINABILITY



TEAR AND DENSITY AT TENSILE



Specific Refining Energy kWh/t	CSF ml	SR number	Tensile index Nm/g	Stiffness index Nm/g	Tear index mNm ² /g	Scott Bond J/m ²	Density kg/m ³	Opacity %	Air res. s
0	622	15	39	5,9	6,7	141	663	73,3	2,7
39	553	18	65	7,4	8,4	324	730	69,9	6,2
80	439	25	81	8,2	8,1	554	778	67,6	25
160	228	46	96	8,9	7,0	1200	845	63,1	477
2	619	15	40	6,0	6,7	148	666	73,2	2,9
32	565	18	60	7,2	8,1	291	718	70,5	6
78	447	25	80	8,2	8,1	539	775	67,7	24
49	525	20	69	7,6	8,3	380	742	69,3	11
80	441	25	81	8,2	8,1	550	777	67,6	22
99	389	30	85	8,4	7,8	708	794	66,5	133
58	500	21	72	7,8	8,3	431	752	68,8	15
95	400	29	84	8,4	7,9	674	790	66,7	109
22	583	17	53	6,8	7,6	242	700	71,4	5

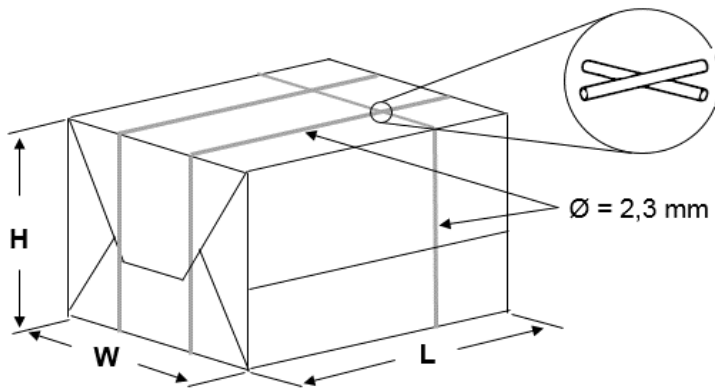
Typical values are averages from all mill quality control samples during 2016. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water.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

UPM Betula Kymi

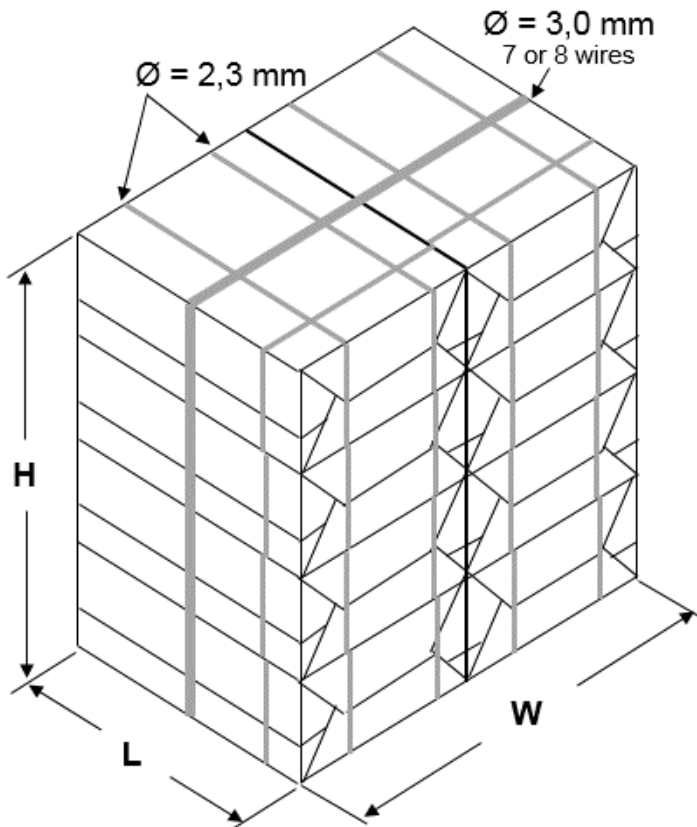
Bale marking

	UPM Betula	BHKP
	5 E	54504
		FIN
	Mill No	Product
		Lot No

Standard bale



Standard bale unit configuration



Sheets

Size:	85 x 70 cm
Grammage:	1100 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:	Red watersoluble inkjet printing. Country, company name, product code and bale number on both sides.
Wires:	3 galvanized wires, diameter 2,3 mm.

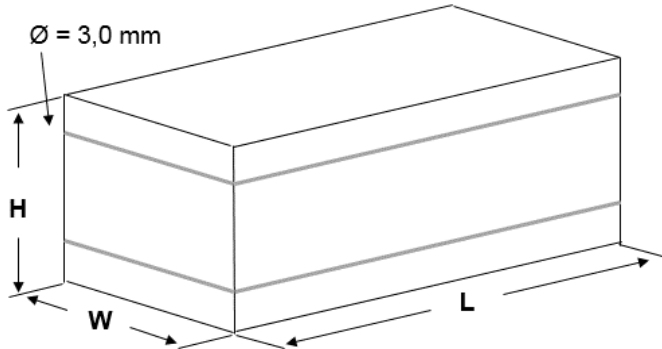
Standard bale unit configuration

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 Betula Kymi

Big bale



Sheets

Size:	85 x 70 cm
Grammage:	1100 g/m ²

Big bale

Size:	L =	175 cm
	W =	87 cm
	H =	72cm

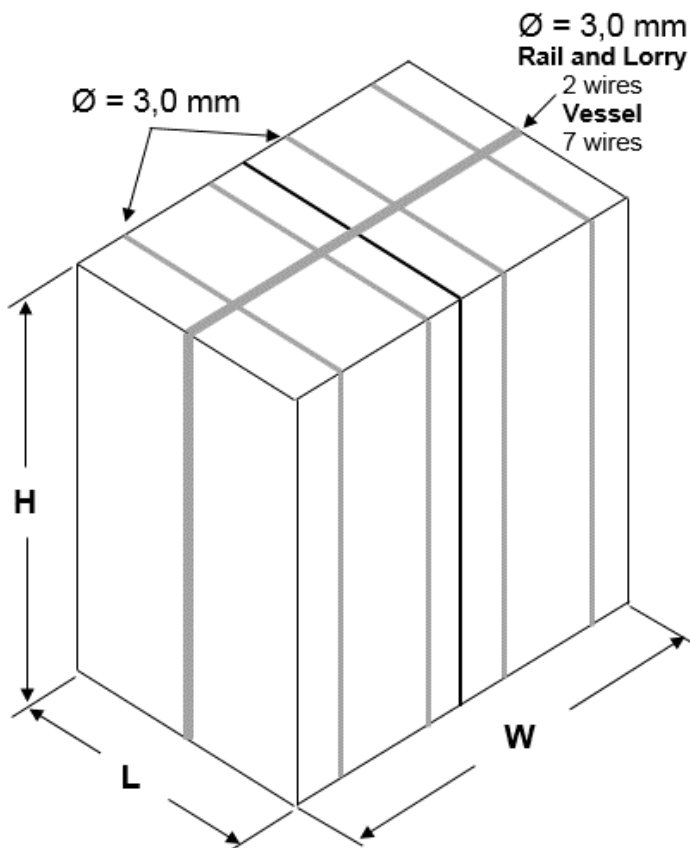
Weight: 1000 kg

Wrapping: No wrapping

Markings: Red 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



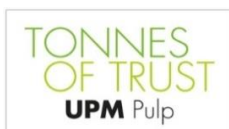
Big bale unit configuration

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



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