

TECHNICAL DATA SHEET

UPM Betula

ECF Bleached Birch Kraft Pulp

Pulp mill: UPM Kaukas

Date of issue: 2.12.2021

PULP CHARACTERISTICS

	Typical value	Spec
Brightness, ISO % ISO 2470-1	89	≥ 88
Impurities, mm ² /kg ISO 5350-2	3	
Extractives, % ISO 14453	0,2	≤ 0,4
Ash content, % ISO 1762	0,4	≤ 0,6
pH ISO 6588-2	5,7	5,0-7,0

FIBRE CHARACTERISTICS

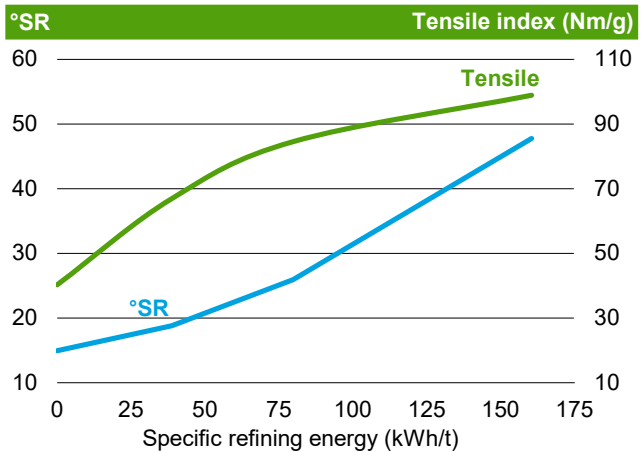
	Typical value
Fibre length, mm Metso FS5	1,07
Coarseness, mg/m Metso FS5	0,08

RAW MATERIAL

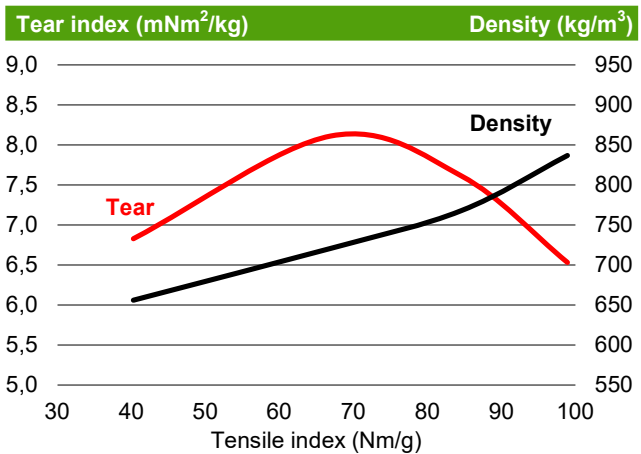
Hardwood

Birch, Aspen and Sawdust

REFINABILITY



TEAR AND DENSITY AT TENSILE

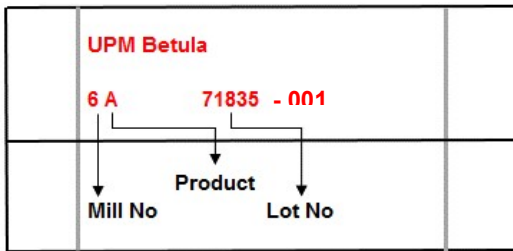


Specific Refining Energy	CSF	SR number	Tensile index	Stiffness index	Tear index	Scott Bond	Density	Opacity	Air res.
kWh/t	ml		Nm/g	kNm/g	mNm ² /g	J/m ²	kg/m ³	%	s
0	632	15	40	6,2	6,8	152	656	73,0	2,5
39	564	19	67	8,0	8,1	328	721	69,2	5,0
80	448	26	85	8,9	7,6	577	768	66,5	21
160	230	48	99	9,6	6,5	1330	837	62,1	532
14	606	16	50	6,9	7,3	215	680	71,6	3
45	544	20	70	8,2	8,0	367	729	68,7	7
109	368	34	90	9,2	7,2	836	793	64,9	191
45	540	20	71	8,1	8,0	370	728	68,8	7
74	464	25	82	8,8	7,7	545	762	66,9	20
96	410	30	88	9,0	7,4	715	785	65,8	118

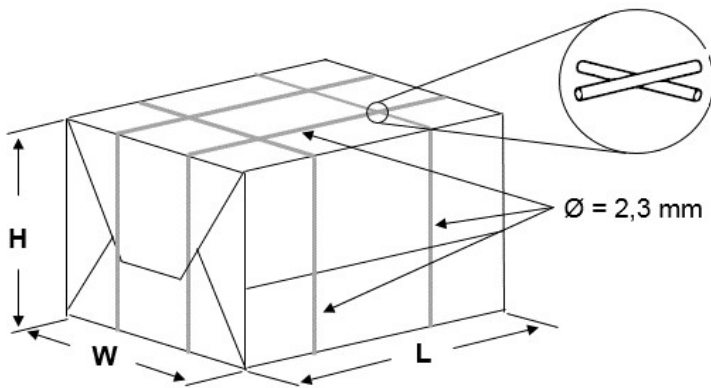
Typical values are averages from all mill quality control samples during H1 2020 - H2 2021. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. Specific Edge Load 0,5 J/m, ISO testing methods (H 50%, 23 °C, 60 gr/m² sheets).

UPM Betula Kaukas

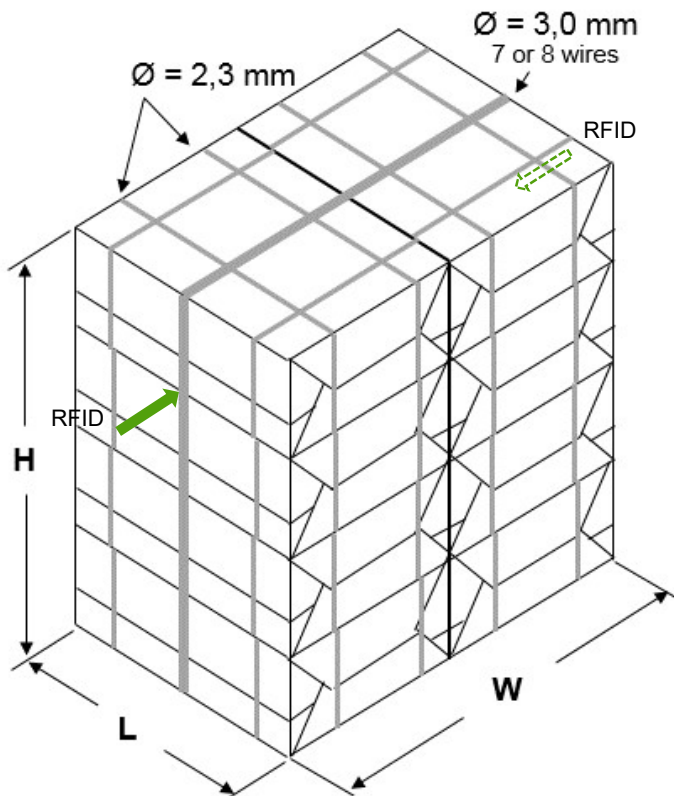
Bale marking



Standard bale



Standard bale unit configuration



Sheets

Size:	85 x 70 cm
Grammage:	850 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:	4 galvanized wires, diameter 2,3 mm.

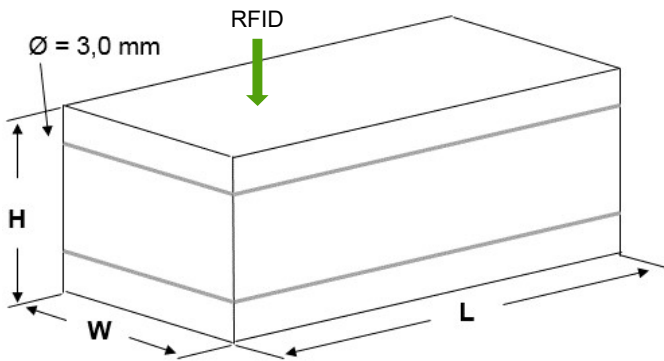
Standard bale unit configuration

Standard bale units

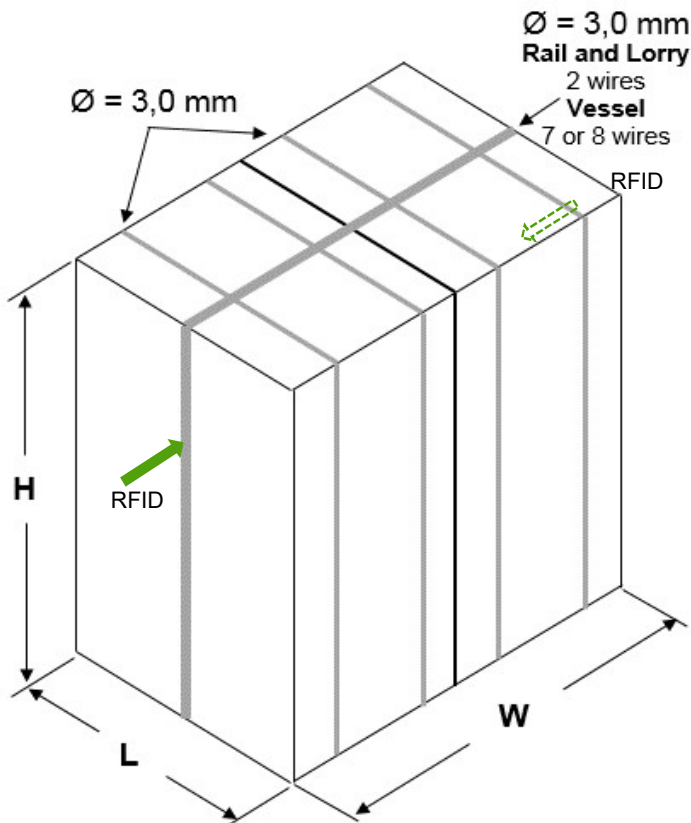
Size:	L = 89 cm
	W = 146 cm
	H = 175cm
Weight:	2000 kg (8 x 250 kg)
Wires:	Vessel 7 or 8 galvanized wires
RFID:	1 tag per ton of pulp (traceability)

UPM Betula Kaukas

Big bale



Big bale unit configuration



Sheets

Size:	85 x 70 cm
Grammage:	850 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

RFID: 1 tag per ton of pulp (traceability)

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

RFID: 1 tag per ton of pulp (traceability)

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