

TECHNICAL DATA SHEET

UPM Betula TCF

TCF Bleached Birch Kraft Pulp

Pulp Mill: UPM Pietarsaari

Date of issue: 2.12.2021

PULP CHARACTERISTICS

	Typical value	Spec
Brightness, ISO % ISO 2470-1	88	≥ 86
Impurities, mm ² /kg ISO 5350-2	3	
Extractives, % ISO 14453	0,3	≤ 0,4
Ash content, % ISO 1762	0,4	≤ 0,7
pH ISO 6588-2	5,8	5,0-7,0

FIBRE CHARACTERISTICS

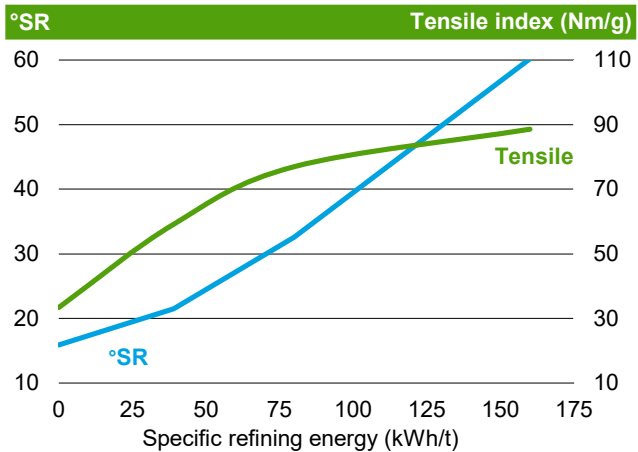
	Typical value
Fibre length, mm Metso FS5	1,03
Coarseness, mg/m Metso FS5	0,08

RAW MATERIAL

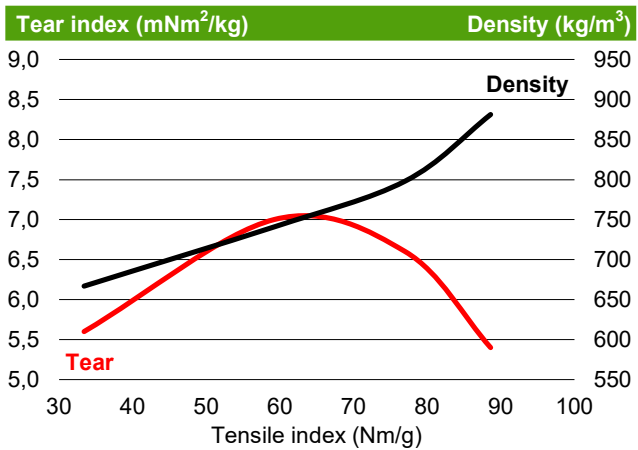
Hardwood

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	605	16	33	5,4	5,6	149	667	73,9	2,7
39	506	22	59	7,2	7,0	390	741	69,5	8
80	359	33	77	8,2	6,6	884	798	66,0	57
160	154	60	89	9,1	5,4	1788	881	58,3	3400
26	545	20	50	6,6	7,6	706	310	71,0	6,0
65	420	28	70	7,8	7,5	762	675	67,5	38
175	110	66	90	9,3	5,6	878	1950	56,0	3900
29	535	20	53	6,6	7,6	712	320	70,8	7,0
54	465	25	65	7,5	7,7	748	540	68,4	14
72	390	30	73	8,0	7,4	772	750	66,9	29

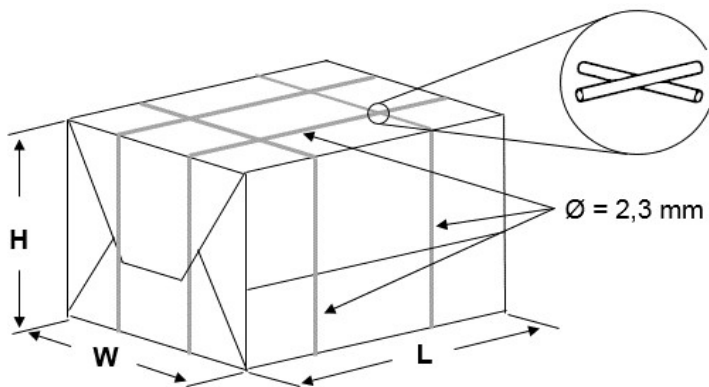
Typical values are averages from all mill quality control samples during H2 2020 - H1 2021. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard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

UPM Betula TCF

Bale marking

	UPM Betula TCF	BHKP	
	8 5	54504 - 001	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

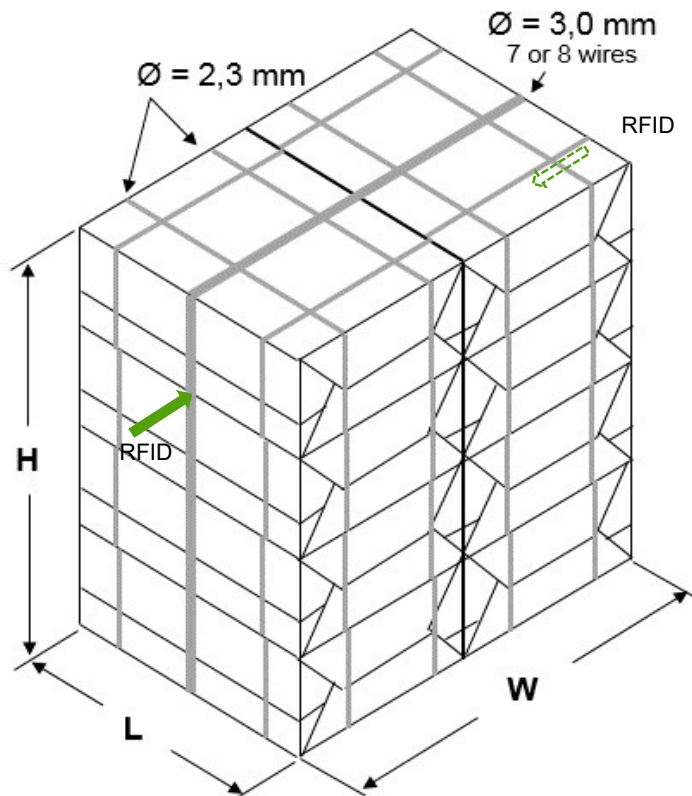
Weight: 250 kg

Wrapping: Pulp sheets (unwrapped on demand)

Markings: 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 unit configuration

Standard bale units

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

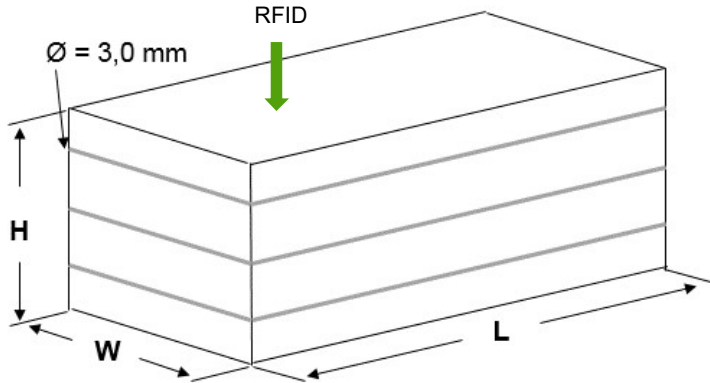
Weight: 2000 kg (8 x 250 kg)

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

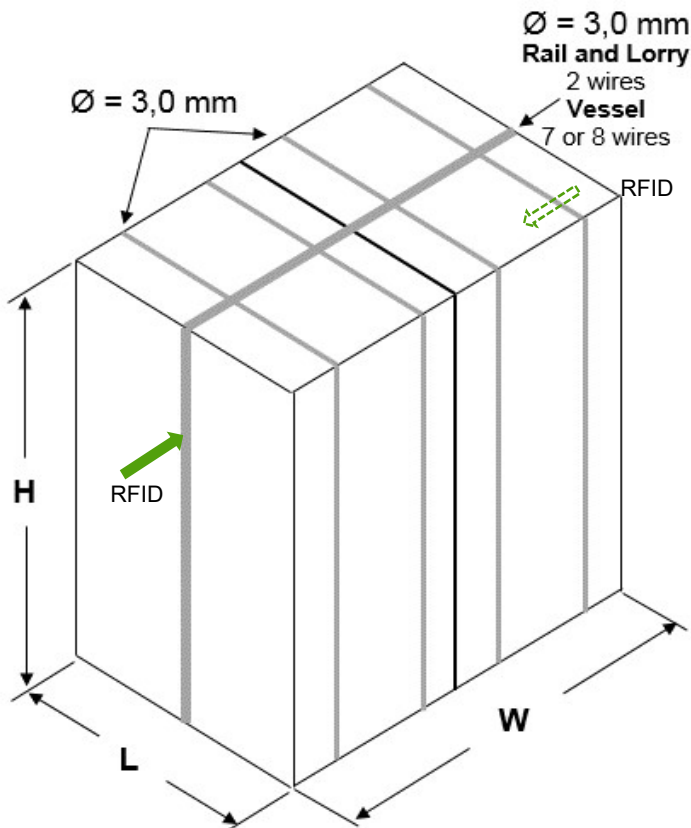
RFID: 1 tag per ton of pulp (traceability)

UPM Betula TCF

Big bale



Big bale unit configuration



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

RFID: 1 tag per ton of pulp (traceability)

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

RFID: 1 tag per ton of pulp (traceability)

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