

TECHNICAL DATA SHEET

UPM Betula TCF

TCF Bleached Birch Kraft Pulp

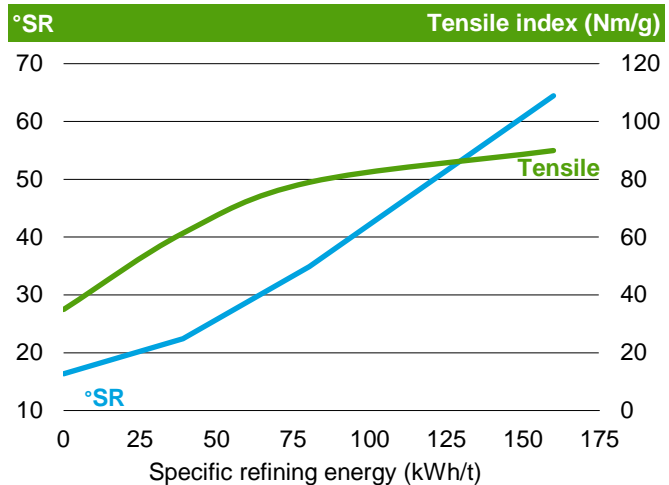
Pulp Mill: UPM Pietarsaari

Date of issue: 24.11.2020

PULP CHARACTERISTICS

	Typical value	Spec
Brightness, ISO % ISO 2470-1	88	≥ 86
Impurities, mm ² /kg ISO 5350-2	3	
Extractives, % SCAN-CM 49:93	0,3	≤ 0,4
Ash content, % ISO 1762	0,4	≤ 0,7
pH 6388-2	5,8	5,0-7,0

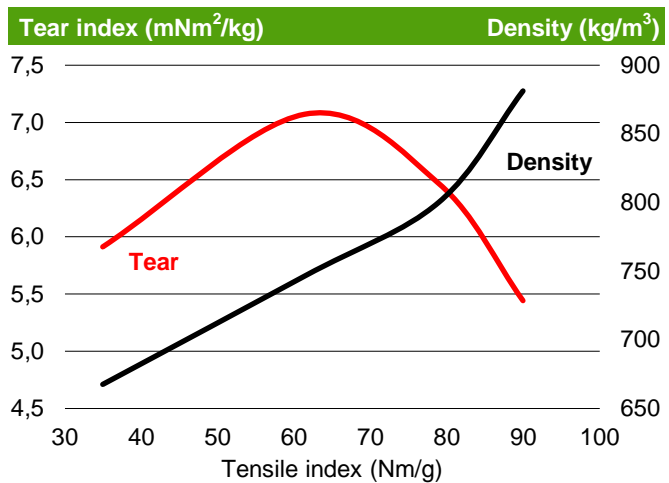
REFINABILITY



FIBRE CHARACTERISTICS

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

TEAR AND DENSITY AT TENSILE



RAW MATERIAL

Hardwood

Birch, Aspen and Sawdust

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	599	16	35	5,5	5,9	174	668	74,5	3,2
39	485	22	61	7,3	7,1	400	746	69,3	10
80	331	35	79	8,4	6,5	864	800	65,9	73
160	119	64	90	9,1	5,4	1702	881	57,8	5415
22	534	20	50	6,5	6,6	303	712	71,6	6,9
59	409	29	70	7,8	6,8	628	773	67,6	41
160	118	65	90	9,1	5,4	1705	882	57,8	5440
24	530	20	51	6,6	6,6	310	715	71,4	7,1
48	452	25	65	7,5	6,9	496	758	68,6	23
64	391	30	72	8,0	6,7	682	779	67,2	48

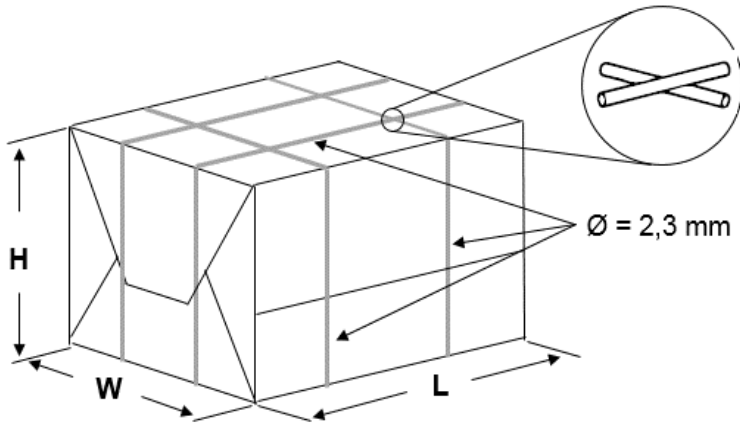
Typical values are averages from all mill quality control samples during 2019-2020. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. 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	FIN
	Mill No	Product	Lot No

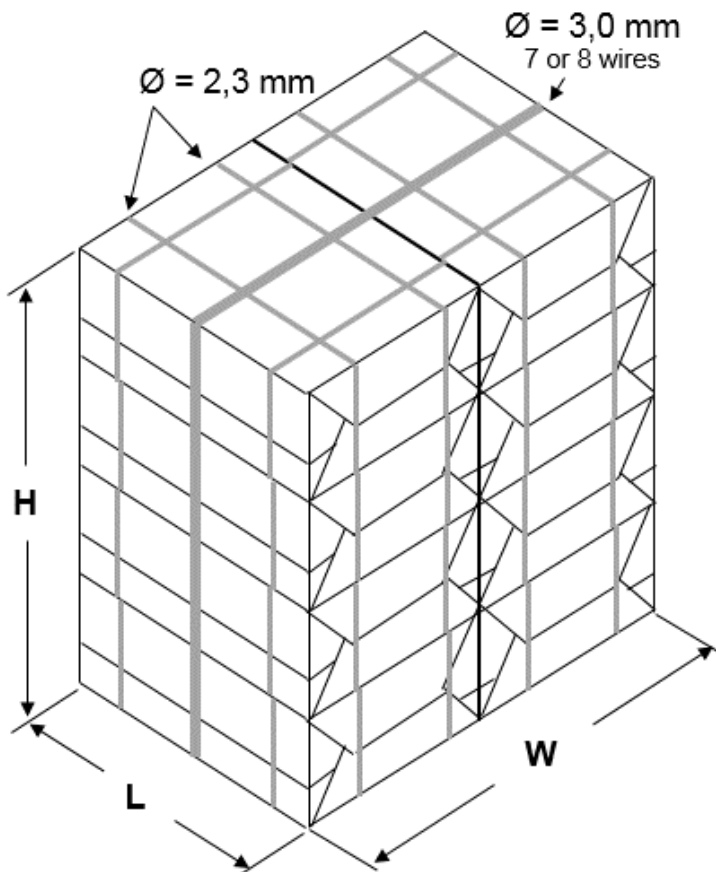
Standard bale



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

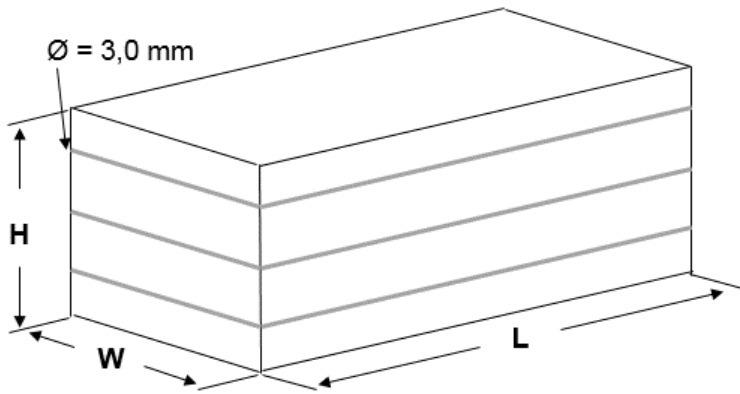


Standard bale unit configuration

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

UPM Betula TCF

Big bale



Sheets

Size:	84 x 73 cm
Grammage:	850 g/m ²

Big bale

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

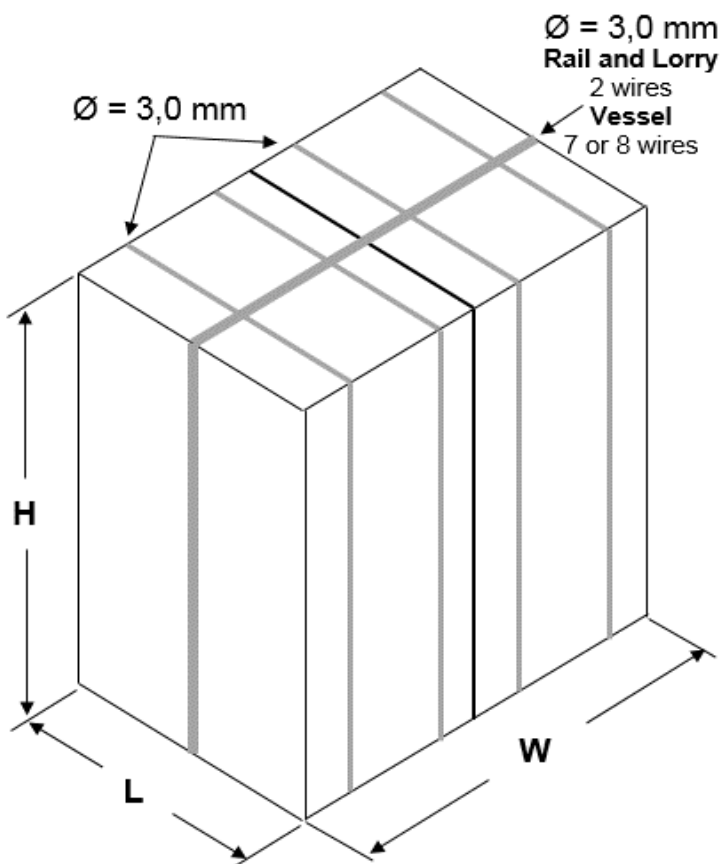
Weight: 1000 kg

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 = 160 cm

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:

Tom Hultholm Senior Product Manager , tel. +358 400 589 529
tom.hultholm@upm.com
www.upmpulp.com