

# TECHNICAL DATA SHEET

## UPM Betula

ECF Bleached Birch Kraft Pulp

Pulp mill: UPM Kaukas

Date of issue: 08.04.2019

### PULP CHARACTERISTICS

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

### FIBRE CHARACTERISTICS

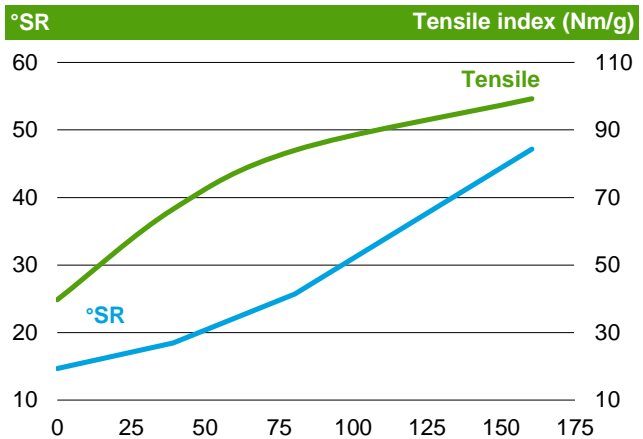
	Typical value
Fibre length, mm Metso FS5	<b>1,07</b>
Coarseness, mg/m Metso FS5	<b>0,08</b>

### RAW MATERIAL

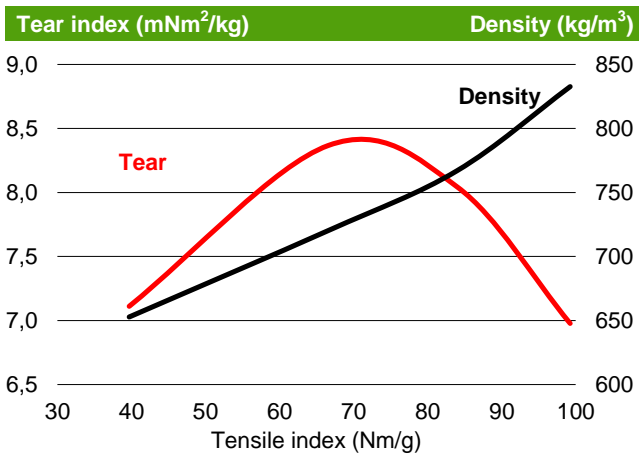
#### Hardwood

Birch, Aspen and Sawdust

### REFINABILITY



### TEAR AND DENSITY AT TENSILE

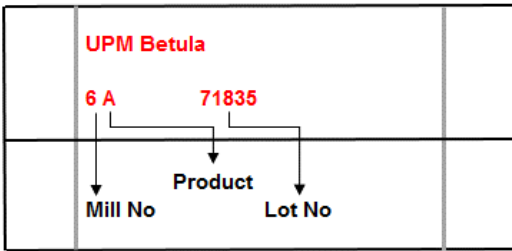


Specific Refining Energy	CSF	SR number	Tensile index	Stiffness index	Tear index	Scott Bond	Density	Opacity	Air res.
kWh/t	ml		Nm/g	Nm/g	mNm <sup>2</sup> /g	J/m <sup>2</sup>	kg/m <sup>3</sup>	%	s
0	632	15	40	5,9	7,1	156	653	73,5	2,8
39	553	18	67	7,7	8,4	349	720	70,0	6,9
80	439	26	84	8,6	8,0	618	767	67,5	30
160	227	47	99	9,4	7,0	1234	833	63,7	523
16	602	16	<b>50</b>	6,6	7,6	230	679	72,2	4
47	530	20	<b>70</b>	7,8	8,3	402	729	69,5	11
112	356	34	<b>90</b>	8,9	7,6	861	793	66,0	224
48	529	<b>20</b>	70	7,9	8,3	406	730	69,5	12
78	447	<b>25</b>	83	8,5	8,1	597	765	67,7	13
96	397	<b>30</b>	87	8,7	7,8	741	780	66,8	128

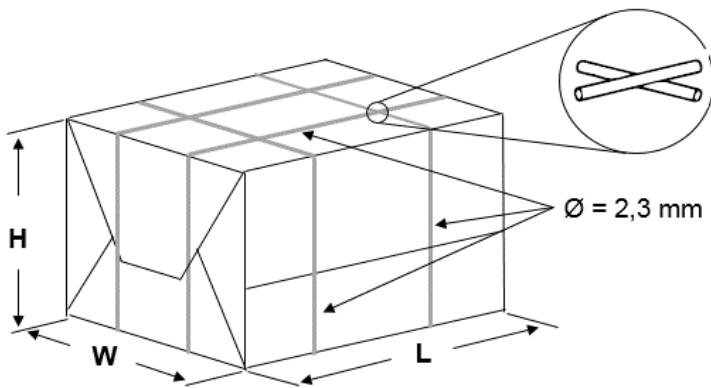
Typical values are averages from all mill quality control samples during 2018. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. Specific Edge Load 0,5 J/m, ISO testing methods (H 50%, 23 °C, 60 gr/m<sup>2</sup> sheets).

## UPM Betula Kaukas

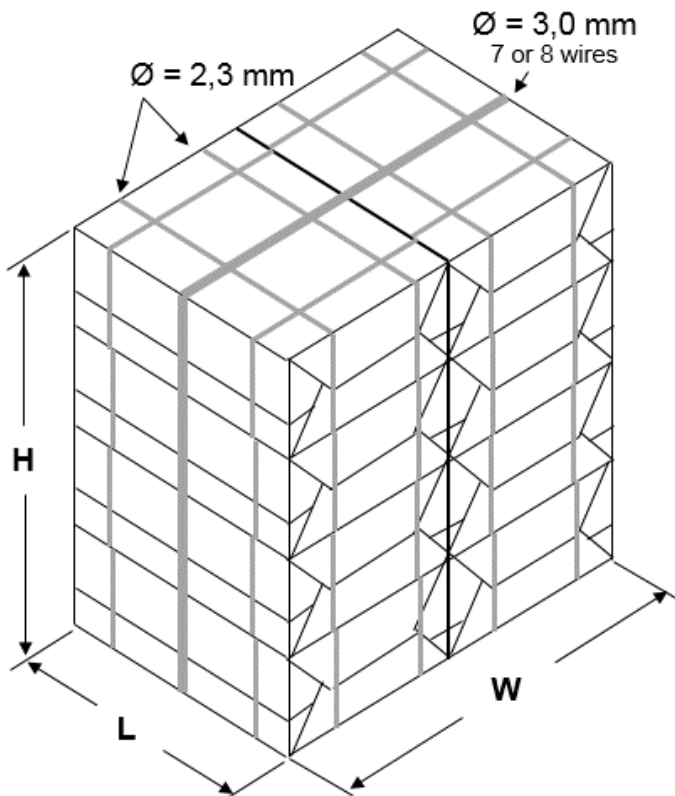
### Bale marking



### Standard bale



### Standard bale unit configuration



### Sheets

<b>Size:</b>	85 x 70 cm
<b>Grammage:</b>	850 g/m <sup>2</sup>

### Standard bale

<b>Size:</b>	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

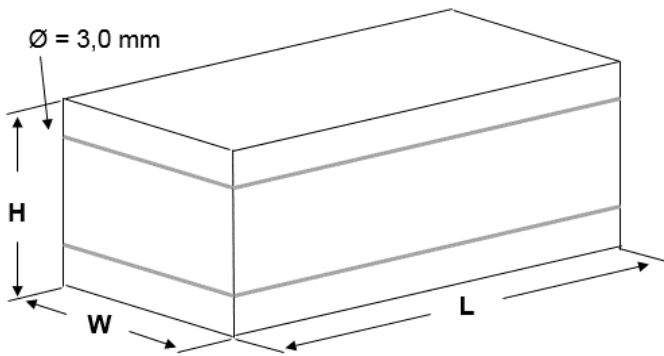
<b>Size:</b>	L =	89 cm
	W =	146 cm
	H =	175cm

**Weight:** 2000 kg (8 x 250 kg)

**Wires:** Vessel 7 or 8 galvanized wires

## UPM Betula Kaukas

### Big bale



### Sheets

<b>Size:</b>	85 x 70 cm
<b>Grammage:</b>	850 g/m <sup>2</sup>

### Big bale

<b>Size:</b>	L =	175 cm
	W =	87 cm
	H =	72cm

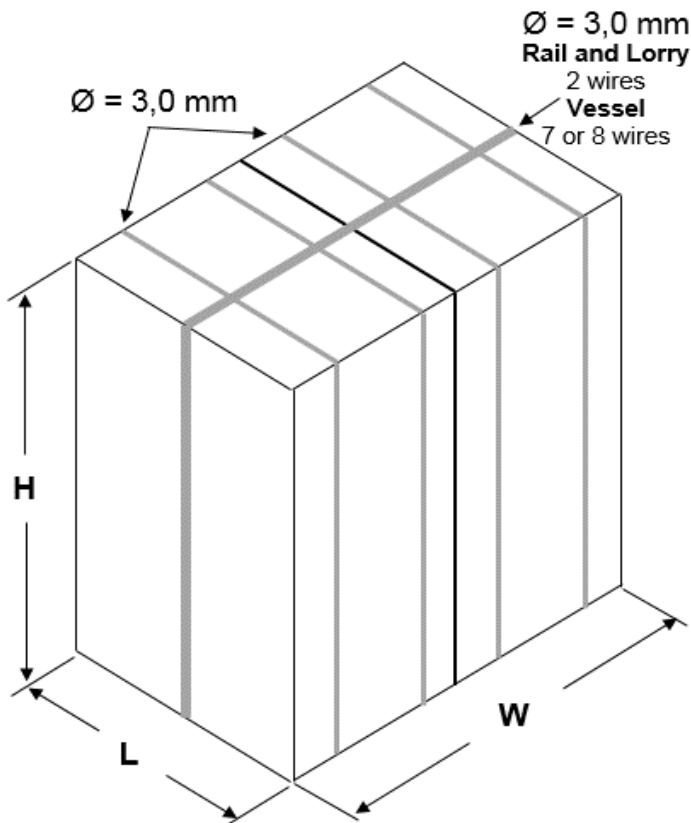
**Weight:** 1000 kg

**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

<b>Size:</b>	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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