UPM FINE H/C

The name says it all. UPM Fine. It provides high brightness, optimal opacity and outstanding suitability for processing. UPM Fine is a flexible multi-use paper. It's ideal for anything from flyers to business reports and from magazines to posters.

UPM FINE H/C:

Category:	Heatset web offset papers, Coldset web offset papers
Grade:	Woodfree uncoated (WFU)
End use:	Advertising material, Books, Business forms, Direct mailing, Magazines, Newspaper supplements, Posters
Finish:	Machine finished
Furnish:	Hardwood and softwood sulphate pulp
Printing Method:	Coldset web offset, Heatset web offset
Format/Size:	Reels
Reel Diameter (cm) :	100.0 - 140.0
Reel Width (cm) :	17.0 - 283.0
Core (mm):	70.0 / 71.0 / 76.0 / 152.0
Wrapping:	Strong kraft paper, Strong moisture proof polyethylene laminated kraft paper
Certificates and Labels:	94/62 EC Heavy Metal Certificate, BfR Food Certificate, EMAS, EN 71/3:1988 D Safety of Toys, EU Ecolabel, FSC Chain-of-Custody, ISO 14001, ISO 50001, ISO 9001, OHSAS 18001, PEFC Chain-of-Custody, Permanent Paper ISO 9706
Note:	PEFC and FSC on request but subject to availability Energy Management system ISO 50001 in place at Nordland Mill.

PRODUCTION UNIT

Name	Kymi	Nordland
Basis Weight Range (g/m2)	70.0 - 100.0	60.0 - 350.0
Reel Width (cm)	17.5 - 283.0	24.0 - 250.0
Reel Diameter (cm)	100.0 - 140.0	100.0 - 130.0
Core (mm)	71.0 / 76.0 / 152.0	70.0 / 71.0 / 76.0 / 152.0
Trimmed width (cm)	850.0	470.0 / 645.0 / 950.0

TECHNICAL TARGET VALUES

Basis Weight (ISO 536) (g/m²)	60.0	70.0	80.0	90.0	100.0	110.0	120.0	140.0	150.0	170.0	190.0	250.0	300.0	350.0
Thickness (ISO 534) (µm)	77.0	90.0	100.0	114.0	123.0	130.0	140.0	160.0	172.0	185.0	205.0	275.0	335.0	385.0
Bulk (ISO 534) (cm3/g)	1.28	1.27	1.27	1.25	1.23	1.21	1.17	1.14	1.14	1.10	1.10	1.10	1.10	1.10
Brightness D65 (ISO 2470-2) (%)	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
CIE Whiteness (%)	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
L-value D65 (D65/10°) (ISO 5631-2)	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
a-value D65 (D65/10°) (ISO 5631-2)	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
b-value D65 (D65/10°) (ISO 5631-2)	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2	-14.2
Opacity ISO (2471) (%)	86.0	90.0	92.0	93.0	94.0	95.0	95.5	97.5	98.0	98.5	99.0	99.5	99.9	99.9
Delta Brightness (D65 - UV cut) (%)	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
Roughness Bendtsen (ISO 8791-2) (ml/min)	250.0	250.0	250.0	250.0	250.0	280.0	280.0	280.0	230.0	230.0	230.0	250.0	250.0	250.0

TECHNICAL TARGET VALUES FOR NORDLAND

Basis Weight (ISO 536) (g/m²)	60.0	70.0	80.0	90.0	100.0	110.0	120.0	140.0	150.0	170.0	190.0	250.0	300.0	350.0
Thickness (ISO 534) (µm)	77.0	90.0	100.0	114.0	123.0	130.0	140.0	160.0	172.0	185.0	205.0	275.0	335.0	385.0
Bulk (ISO 534) (cm3/g)	1.28	1.27	1.27	1.25	1.23	1.21	1.17	1.14	1.14	1.10	1.10	1.10	1.10	1.10
Brightness D65 (ISO 2470-2) (%)	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
CIE Whiteness (%)	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
L-value D65 (D65/10°) (ISO 5631-2)	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
a-value D65 (D65/10°) (ISO 5631-2)	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
b-value D65 (D65/10°) (ISO 5631-2)	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9
Opacity ISO (2471) (%)	86.0	90.0	92.0	93.0	94.0	95.0	95.5	97.5	98.0	98.5	99.0	99.5	99.9	99.9
Delta Brightness (D65 - UV cut) (%)	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
Roughness Bendtsen (ISO 8791-2) (ml/min)	250.0	250.0	250.0	250.0	250.0	280.0	280.0	280.0	230.0	230.0	230.0	250.0	250.0	250.0

TECHNICAL TARGET VALUES FOR KYMI

Basis Weight (ISO 536) (g/m²)	70.0	80.0	90.0	100.0
Bulk (ISO 534) (cm3/g)	1.30	1.28	1.29	1.28
Brightness D65 (ISO 2470-2) (%)	103.0	103.0	103.0	103.0
CIE Whiteness (%)	150.0	150.0	150.0	150.0
Opacity ISO (2471) (%)	90.0	92.0	93.0	94.0
Roughness Bendtsen (ISO 8791-2) (ml/min)	250.0	250.0	250.0	250.0

PREPRESS GUIDELINES

CIE L*-value (D50/2°) WB	93.7
CIE a*-value (D50/2°) WB	2.5
CIE b*-value (D50/2°) WB	-7.0
Max. Total Area (TAC%)	300
ICC Paper profile	PSO_Uncoated_ISO12647_eci.icc
Characterisation data	FOGRA47L.txt
TVI Curve	C(CMY), D(K)
AM Screen recommendation (l/cm)	60
ISO/ECI Profile (FM)	PSO_Uncoated_NPscreen_ISO12647_eci.icc
FOGRA Char. Data (FM)	FOGRA44L.txt
TVI Curve (FM)	F(CMYK)
FM Screen recommendation (µm)	35
Measurement condition for D50	ISO 13655, M0; D50/2°
Measurement equipment	Techkon RS800