

Classification of papers for gravure and offset processes

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Classification of gravure papers 2006

- Gravure printers (bvdm committee) and paper manufacturers jointly developed the classification of gravure publication papers
- Paper manufacturers allocated their products into the classification (coated and uncoated)
- ECI gravure working group (bvdm, ECI, ERA) adopted the classification, it is considered as applicable and complete
- Standard gravure printing conditions (HWC; LWC; SC; MF) are fitting well into classification

Classification of gravure papers 2006 Uncoated papers

Paper class	Abbreviation	Description
News-Standard	N-St	Standard newsprint without gravure adaptation
News-Plus	N-P	Improved newsprint for gravure process
Directory	Dir	Uncoated wood content for directories
SC-B	SC-B	High content of recycled paper; online calandered
SC-Standard	SC-St	Super calandered magazine paper with low content of recycled paper
SC-Plus	SC-P	Opt. improved SC paper
SC 80	SC 80	Highly opt. improved SC paper, partially semimatte

Classification of gravure papers 2006 Coated papers

Paper class	Abbreviation	Description					
LWC-Standard	LWC-St	<u>Light weight coated catalogue or LWC – Catalogue</u>					
		magazine paper; wood content	LWC – Magazine				
LWC-Plus	LWC-P	Opt. improved coated magazine paper; wood content					
MWC 90	MWC 90	<u>Medium weight coated;</u> double coated magazine paper; high content opt. brightener					
HWC- <u>W</u> ood <u>F</u> ree	HWC-WF	Heavy weight coated, 2-3 times coated offset paper high mainly for cover production	content opt. brightener;				



Classification of gravure papers 2006

Documentation

- Classification of papers for gravure publication printing (8 pages document download www.bvdm.org)
- 7 international paper manufacturers:
 Burgo, Holmen, Myllykoski, Norske Skog,
 SCA, Stora Enso, UPM
- 85 papers allocated to 11 categories

Classification of gravure papers: uncoated

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Standard appr.		1	1		I
Paper	Paper Type	Description	ISO	Bulk	Product
Type	long version	Description	brightness	[cm³/g]	examples
N-ST	News Standard	standard newsprint without gravure adaptation	58-59	1,35 – 1,60	Holmen News
N-P	PSR_ECI_MF News Plus	improved newsprint for gravure process	68-76	1,35-1,50	Holmen Plus G68, Exopress, Flyopress
DIR	Directory	uncoated wood content for directories	56-71	1,25-1,50	Opalite G, Opalite 67 G Alfa (+)
SC-B	SC B	high content of recycled paper; online calandered	65-69	0,85-0,95	UPM ECO, Envipress
SC-ST	PSR_ECI_SC SC Standard	super calandered magazine paper with low content of recycled paper	67-68	0,85	UPM Max G, Publipress GraphoGravure
SC-P	SC Plus	opt. improved SC paper	72-75	0,85 -0,90	UPM cat, M-Plus, GraphoGrande
SC-80	SC 80	highly opt. improved SC paper, partially semimatte	79-82	0,85 -0,94	UPM Lux 80, Innopress, GraphoPrestige

application : PSR_ECI_LWC

application : PSR_ECI_SC

application : PSR_ECI_MF

Classification of gravure papers: coated

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	1	standard appl.	ı		E I		ı
	Paper Type	Paper Type long version	Description	Description b light weight coated high wood content, film coating		Bulk [cm³/g]	Product examples
	LWC-B	LWC B	high wood cont			0,80	Ultra Mag RG
	LWC-St	PSR_ECI_LWC	light weight coated	LWC catalogue	67-72	0,80	UPM Cote G, Bavaria Ultra, Turnopress
		Standard	catalogue or magazine paper; wood content		72-76	0,84 - 0,89	Bavaria Classic, Neopress, UPM Cote G
•	LWC-P	LWC Plus PSR_ECI_HWC	opt. improved coated magazine paper; wood content medium weight coated; double coated magazine paper; high content opt. brightener		78-87	0,75 - 0,80	UPM Cote Plus Terrapress, UPM Ultra, MY Brite
	MWC-90	MWC 90			90-92	0,75 - 0,80	UPM Star, Novapress G
	HWC-WF	HWC woodfree	heavy weight coated coated offset pa high content opt, bri mainly for cover pro	aper ightener;	>92	0,72 - 0,80	Galerie fine, Royal Xpress, UPM Finesse







Classification of papers for offset processes (proposal) 2006

- Classification of papers for offset processes (sheet-fed, web-fed, continuous forms, newspaper printing)
- Integration of existing paper classes of ISO 12647-2 and ISO 12647-3 (PT 1 to 5, newsprint)
- 16 subcategories (to be reviewed), papers to be allocated by paper manufacturers

Classification of offset papers - coated

Paper Type	Paper Type long version	Description	ISO brightness	Bulk (cm³/g)	Product examples
PT1	Paper Type 1 (ISO 12647-2)	gloss coated woodfree offset	89-95	_	Hanno Art Gloss (Sappi), BVS gloss (Scheufelen), Ikonogloss (M-real)
PT 1/2	Paper Type 1/2 (ISO 12647-2)	semimatte coated woodfree offset	89-95		Hanno Art Silk (Sappi), Magno Satin (Sappi), Lumisilk (StoraEnso)
PT2	Paper Type 2 (ISO 12647-2)	matte coated woodfree offset	89-95		BVS matte (Scheufelen), Zanders Mega matte
HWC-WF	HWC- <u>W</u> ood <u>F</u> ree	<u>Heavy weight coated</u> , 2-3 times coated offset paper high content opt. brightener	>92	0,72-0,80	Galerie fine, Royal Xpress, UPM Finesse Alpabrillant (Myllykoski)
MWC-90	MWC 90	Medium weight coated; double coated magazine paper; high content opt. brightener	90-92	0,75-0,80	UPM Star, Novapress
LWC-P	LWC-Plus	Opt. improved coated magazine paper; wood content	78-87	0,75-0,80	UPM Cote Plus, Terrapress UPM Ultra, MY Brite
LWC-St	LWC-Standard	<u>L</u> ight <u>w</u> eight <u>c</u> oated catalogue or magazine paper; wood content	67-76	0,80-0,89	UPM Cote, Bavaria Ultra, Turnopress
LWC-B	LWC B	<u>L</u> ight <u>weight coated higher</u> content of recycled paper, film coated	72	0,80	



Classification of offset papers - uncoated

	iper /pe	Paper Type long version	Description	ISO brightness	Bulk (cm³/g)	Product examples
PΊ	14	Paper Type 4 (ISO 12647-2)	uncoated, white woodfree offset	93	_	Tauro Offset (M-real), UPM Fine, Zeta matte white (M-Real)
SC	C-80	SC 80	highly opt. improved SC paper, partially semimatte	79-82	0,85-0,94	UPM Lux 80, Innopress, GraphoPrestige
РΊ	75	Paper Type 5 (ISO 12647-2)	uncoated yellowish woodfree offset	73	_	Munken Pure (Arctic Paper)
SC	C-P	SC-Plus	Opt. improved SC paper	72-75	0,85-0,90	UPM cat, M-Plus, GraphoGrande
St.	;- andard	SC-St	Super calandered magazine paper with low content of recycled paper	67-68	0,85	UPM Max, Publipress (Stora), Graphoset (SCA)
SC	С-В	SC B	High content of recycled paper; online calandered	65-69	0,85-0,95	UPM ECO, Envipress, LP-HO (Myllykoski)
Di	r	Directory	Uncoated wood content for directories	56-71	1,25-1,50	Opalite, Opalite 67
N-	P	News-Plus	Improved newsprint for offset heatset	68-76	1,35-1,50	Holmen Plus, Exopress, Flyopress
N-	St	News-Standard	Standard newsprint without offset heatset adaptation	58-59	1,35-1,60	Holmen News

Classification of gravure papers: uncoated

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	1	standard appl.	1			1
	Paper	Paper Type	Description	ISO	Bulk	Product
<u> </u>	Type	long version	Description	brightness	[cm³/g]	examples
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application : PSR_ECI_MF

Classification of gravure papers: coated

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	,	standard appl.	1		1 1		ı
	Paper Type	Paper Type long version	Description	Description b		Bulk [cm³/g]	Product examples
	LWC-B	LWC B	<u>l</u> ight <u>w</u> eight <u>c</u> oated high wood content, film coating		72	0,80	Ultra Mag RG
	LWC-St	PSR_ECI_LWC LWC Standard	light <u>w</u> eight <u>c</u> oated c catalogue or magazine paper; wood content	LWC catalogue	67-72	0,80	UPM Cote G, Bavaria Ultra, Turnopress
				i	72-76	0,84 - 0,89	Bavaria Classic, Neopress, UPM Cote G
	LWC-P	LWC Plus PSR_ECI_HWC	magazine paper: wood content		78-87	0,75 – 0,80	UPM Cote Plus Terrapress, UPM Ultra, MY Brite
	MWC-90	MWC 90	<u>m</u> edium <u>w</u> eight <u>c</u> oated; double coated magazine paper; high content opt. brightener		90-92	0,75 - 0,80	UPM Star, Novapress G
	HWC-WF	HWC woodfree	heavy weight coated 2-3 times coated offset paper high content opt. brightener; mainly for cover production		>92	0,72 - 0,80	Galerie fine, Royal Xpress, UPM Finesse

application: PSR_ECI_LWC

