



ECI Gravure Profiles 2009 Process Standard Rotogravure (PSR)

December 2009

New characterisation data and ICC profiles for standard printing conditions - with SC Plus

New characterisation data and ICC profiles for publication gravure printing have been available since June 2009. The Gravure Working Group of the ECI, with members from many European countries and supported by bvdm, ERA and Fogra, has brought the printing conditions for gravure printing on LWC Plus, LWC Standard and SC papers fully up to date. The paper types were completed with SC Plus in December 2009. The table shows an overview of the profiles.

The new PSR V2 profiles were tested for nine months in practice before they were published, and are ready for immediate use in production..

The action to update the previously existing standard printing conditions (Process Standard Rotogravure PSR v1) was agreed by gravure printers and their customers (magazine publishers and catalogue publishers) in April 2007. Starting in summer 2007, the ECI working group, under the leadership of Bernhard Schmidt (Prinovis GmbH), worked on the improvement of the existing standard for pa-

per types "SC Standard" (super calendered), "SC Plus" (whiter super calenderd), "LWC Standard" (light weight coated) and "LWC Plus" (improved LWC paper).

The LWC Plus standard replaces the previous HWC standard, and puts the correct name for the paper type into the profile. The printing condition "PSRgravureMF", issued in 2004, remains valid.

In addition to the characterisation data with 1617 patches according to ISO 12642-2, an extended characterisation dataset is available with 3759 additional patches, making a total of 5376. The use of the extended characterisation dataset may offer advantages in particular fields of use – for example proof system calibration.

The ICC profiles were created with the following settings: maximum ink coverage of 360 %, maximum black of 85 %, beginning at around 25 % and with medium GCR.

The profiles and characterisation data are available free of charge on the ECI website (www.eci.org) for download.

Table: Standard gravure printing conditions 2009 (bvdm/ECI/ERA/Fogra)

Paper type	Profile	Characterisation data *3	Year of issue
LWC Plus *1	PSR_LWC_PLUS_V2_PT.icc	PSR_LWC_PLUS_V2.txt	2009
LWC Standard	PSR_LWC_STD_V2_PT.icc	PSR_LWC_STD_V2.txt	2009
SC Plus	PSR_SC_Plus_V2_PT.icc	PSR_SC_Plus_V2.txt	2009
SC Standard	PSR_SC_STD_V2_PT.icc	PSR_SC_STD_V2.txt	2009
News Plus *2	PSRgravureMF.icc	PSRgravureMF_ECI2002.txt	2004

*1 The name "LWC Plus" replaces the previous designation "HWC".

*2 News Plus papers are gravure-oriented improved newsprint papers: for this type the Standard PSRgravureMF.icc (V1) is still valid.

*3 The characterisation data printed patches were measured on a backing of unprinted sheets of the same paper (SB=substrate backing)

Special characteristics of LWC Plus

As there is no standard shade for LWC Plus in the paper industry, the “paper white” colours of different brands are sometimes very different. Therefore an LWC Plus paper with a shade in the middle of those available in the market in 2008 was chosen.

Proofing

Proofs can be made with ICC-based proofing systems, but also with vendor-specific proofer adaptations. In some cases, depending on the approach taken by the vendor, these profiles give higher precision through multiple iterations and additional possibilities such as simulation of the printing behaviour and improved sharpness control. These profiles are downloadable directly from the proofing system supplier.

Which profile should I use?

The profile should be chosen in the first instance according to the paper type to be used. In addition to the supported paper types, there are many additional paper types and grades, which make the matter more complex. In general we recommend an orientation to the technical guidelines of the customer, for example their Technical Guidelines for Advertisement Production.

Here is an overview of the classification of gravure papers, and the recommended areas of use of the existing PSR standards:

Uncoated papers:

Paper type	Definition	ISO Brightness	Examples	PSR Standard
N-ST (News Standard)	Standard newsprint without adaptation to gravure	58-59	Holmen News	
N-P (News Plus)	Improved newsprint for gravure	68-76	Holmen Plus G68, Exopress, Flyopress	PSRgravureMF PSR V1
DIR (Directory)	uncoated directory paper	56-71	Opalite G, Opalite 67 G, Alfa (+)	
SC-B (SC-B)	only calendered, high content of recycled fibre	65-69	UPM ECO, Envipress	
SC-STD (SC Standard)	super calendered magazine paper	67-68	UPM Max G, Publipress, GraphoGrande	PSR_SC_STD_V2 PSR V2
SC-P (SC Plus)	Optically improved SC paper	72-75	UPM cat, M-Plus, GraphoGrande	PSR_SC_PLUS_V2) ¹ PSR V2
SC-80 (SC 80)	Highly opt. improved SC paper, partly matt	79-82	UPM Lux G, Innopress, GraphoPrestige	

¹ SC Plus - new since December 2009

Coated papers:

Paper type	Definition	ISO Brightness	Examples	PSR Standard
LWC-B (LWC B)	Light weight coated, High content of recycled fibre, film coated	72	Ultra Mag RG	
LWC-STD (LWC Standard)	Light weight coated, "catalogue" brightness	67-72	UPM Cote G, Bavaria Ultra, Turnopress	PSR_LWC_STD_V2 PSR V2
LWC-STD Mag (LWC Standard)	Light weight coated, "magazine" brightness	72-76	Bavaria Classic, Neopress, UPM Cote G	
LWC-P (LWC Plus)	Optically improved LWC paper	78-87	UPM Cote Plus, Terrapress, UPM Ultra, My Brite	PSR_LWC_PLUS_V2 (formerly known as HWC) PSR V2
MWC-90 (MWC 90)	Medium weight coated; double coated, very high brightness, optical brighteners	90-92	UPM Star, Novapress G	
HWC-WF (HWC woodfree)	Heavy weight coated, 2-3 times coated offset paper, optical brighteners	>92	Galerie fine, Royal Xpress, UPM Finesse	"House standards" or PSR_LWC_PLUS_V2