



Description of types of paper

Introduction

Different classes of paper are classified within paper type groups according to their individual characteristics.

For each paper type group, an appropriate colour profile is available for down-loading from the website of Roto Smeets, RS GrafiServices or from Senefelder Misset Doetinchem, depending on which factory will print the job and which print process is used.

This document provides an explanation of the abbreviations used in paper classification.

An overview of the abbreviations

Web offset

Paper class	Colour Profile	Fogra	Paper Type
WFC (wood free coated)	ISO Coated V2 300(ECI)	39	PT1 / 2
LWC (lightweight coated)	PSO Improved LWC (ECI)	45	PT 3
SC (super calendered)	SC Paper (ECI)	40	SC
MFC (machine finished coated)	PSO MFC Paper (ECI)	41	MFC
INP (improved news print)	weboffset_RS0210_NP.icc	-	PT 4
SNP (standard news print)	PSO SNP paper (ECI).icc	-	SNP
WFU (wood free uncoated)	weboffset_RS0210_WFU.icc	-	PT 4

Sheetfed Offset

Paper class	Profile	Fogra	Papertype
Coated	ISO Coated V2 300 (ECI)	39	PT 1 / 2
Uncoated	PSO Uncoated ISO12647 (ECI)	47	PT 4
Uncoated Yellowish (Recycled)	ISO Uncoated Yellowish	30	PT 5

For accurate colour reproduction on colour-critical jobs, the use of a correct colour profile for the colour conversion from RGB to CMYK and for hardcopy proofing and soft proofing is essential. This colour profile varies according to the print process used (sheetfed offset, web offset or rotogravure) and to the type of paper. In case this information is not available for the specific grade of paper to be used, please use the colour profile ISOcoated_v2_300_eci.icc . In such a case, please bear in mind that colour variations may occur when using this profile with uncoated papers.

A description of the various paper classes:

WFC: Wood-free MC available in gloss, silk or matt finishes.

This paper consists of cellulose obtained from chemical pulping.

A coating is applied on both sides after which the surface is double calendered. The coating layer consists mainly of china clay and binding agent, and helps to improve the printing quality. Wood-free paper in lighter weights of 90g and below do not always provide the desired degree of opacity, particularly for jobs with heavy ink coverage.

LWC: wood-containing and lightwood mc

The following grades are included in this paper group:

- Near-woodfree coated (gloss, silk or matt)
- Extra-white light-weight coated (gloss, silk or matt)
- Standard light-weight coated

Standard lightweight coated papers are made mainly from mechanical pulp, with a small percentage of chemical pulp. Papers containing higher percentages of chemical pulp are whiter, and near-woodfree papers are whiter still. These papers can be supplied with gloss or matt finish.

MFC: machine finished coated / film coated

This is a high brightness paper made from mechanical pulp with a light on-machine film coating and soft calendering, resulting in exceptionally high bulk in relation to the basis weight. This paper is normally less expensive than light-weight coated paper of the same weight.

SC: super calendered

This is an coated paper made mainly from mechanical pulp and calandered to provide a smooth finish and good printability, although runnability is less good than lightweight coated grades of the same weight. More expensive grades of super calendered paper contain higher percentages of chemical pulp, resulting in a higher level of brightness. In ascending order of brightness and cost, this group includes:

SC-B

SC-A

SC-Cat

SC-Cat+

INP: Improved Newsprint

This is an uncoated paper made mainly from mechanical pulp, normally containing a percentage of post-consumer recycled pulp and some chemical pulp. Compared with Standard Newsprint grades, Improved News has a less open surface (resulting in less ink absorption into the fibres of the paper) and is whiter in shade (Improved news grades have an ISO brightness of at least 65).

SNP: Standard Newsprint.

Standard newsprint contains little or no chemical pulp and is therefore composed of mechanical pulp from a variety of wood sources, from which lignin has not been chemically removed. The presence of lignin in the pulp accounts for its tendency to yellow with age and exposure to light. Standard Newsprint normally contains substantial percentages of pulp recycled from post-consumer waste.

WFU: wood free Uncoated

This group of papers is designed for printing by web offset or sheetfed offset. Whilst decribed as "woodfree", these papers normally contain at least a small percentage of mechanical pulp, but they are smoother in surface and whiter than a standard Uncoated grade.