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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17934.6-2025

Replacing GB/T 17934.6-2014

**Graphic technology - Process control for the production of
half-tone colour separations, proof and production prints - Part
6: Flexographic printing**

印刷技术 网目调分色版、样张和生产印刷品的加工过程控制 第6部分：柔性版印刷

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 6 of GB/T 17934 "Printing technology - Process control of halftone color separations, samples and production prints" GB/T 17934 has published the following parts.

- Part 1: Parameters and measurement methods;
- Part 2: Offset lithography;
- Part 3: Newsprint coldset offset lithography;
- Part 4: Publishing gravure;
- Part 5: Screen printing;
- Part 6: Flexographic printing;
- Part 7: Proofing process using digital data directly;
- Part 8: Verification of print production processes using digital data directly.

This document replaces GB/T 17934.6-2014 "Printing technology - Process control of halftone color separation sheets, samples and printed products" Part 6: Flexographic Printing, compared with GB/T 17934.6-2014, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) Deleted the specific provisions on the parameter value of screen line number (see 4.2.3 of the 2014 edition);
 - b) Added requirements for target reference printing condition color gamut, spot color measurement and ICC profile in the digital data file section Description (see 4.2.4);
 - c) Changed the film/plate requirements, and detailed the requirements for color separation plates, digital plates, and films (see 4.2.4, 2014 edition).
- 4.2.2);
- d) The L^* value of the color of the printed substrate has been changed from ≥ 88 to > 85 (see 4.3.3, 4.3.2.1 of the 2014 edition);
 - e) The requirements for ink color have been changed from CIELAB, which specifies the printing of primary colors and secondary colors for different types of substrates.

The values are adjusted to the CIELAB hue angle target values for the printed primary and secondary solid colors and are independent of the type of substrate (see 4.3.4, 4.3.2.3 of

the 2014 edition);

f) Added requirements for ink gloss (see 4.3.6);

g) The provisions on the value of tone increase have been changed from setting specific value of tone increase for different substrate types to setting the value of tone increase for different substrate types.

Matching of characterization data sets (see 4.3.8, 4.3.5 of the 2014 edition);

h) The description parameters of the deviation tolerance of the original printing color have been changed from the original CIELAB color difference to the hue angle deviation and other parameters.

Number (see 4.3.4, 4.3.2.3 of the 2014 edition);

i) Changed the description parameter of the original CIELAB color difference to ΔE_{00} , and adjusted Parameter values (see 4.3.4, 4.3.2.3 of the 2014 edition);

j) Added the provisions on deviation tolerance and fluctuation tolerance of spot color in the ink color reproducibility part (see 4.3.5);

k) Added "Table 5 List of attributes that need to be communicated" (see Chapter 5);

l) Added Appendix A on the transmission of spot color data (see Appendix A).

This document is equivalent to ISO 12647-6:2020 "Printing technology - Process control of halftone color separations, samples and production prints" Part 6: Flexographic printing.

Introduction

This document is part 6 of GB/T 17934 "Printing technology - Process control of halftone color separations, samples and production prints" GB/T 17934 is planned to consist of 9 parts.

--- Part 1: Parameters and measurement methods;

--- Part 2: Offset lithography;

--- Part 3: Newsprint coldset offset lithography;

--- Part 4: Publishing gravure;

--- Part 5: Screen printing;

--- Part 6: Flexographic printing;

--- Part 7: Proofing process using digital data directly;

--- Part 8: Verification of print production processes using digital data directly;

--- Part 9: Metallic offset lithography.

Printing technology Halftone color separation plates, proofs and process control for the production of printed products Part 6: Flexographic printing

1 Scope

This document specifies the data exchange requirements and targets for four-color flexographic printing used for packaging and publications including newspapers this document specifies the colorimetric target values for printing based on color characterization data and also includes the information required to specify the flexographic printing Reasonable setting of key parameter values during the processing and recommended tolerances.

This document is directly applicable to.

---Flexographic printing of publications including magazines, product samples and commercial printing, as well as products including labels, cartons, flexible packaging, etc.

Flexographic printing of product packaging.

--- Halftone and continuous tone proofing processes for predicting colorimetric results in flexographic printing.

This document also provides guidance on specifying spot colors used in flexographic printing.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

gy-Densitymeasurements-Part 3: Spectralconditions) Note. GB/T 11501-2008 Photographic density measurement Part 3: Spectral conditions (ISO 5-3:1995, IDT) ISO 2813 Paints and varnishes - Determination of gloss at 20°, 60° and 85° Note. GB/T 9754-2007 Paints and varnishes Determination of 20°, 60° and 85° specular gloss of paint films not containing metallic pigments (ISO 2813:1994, IDT) ISO/T S10128 Graphic technology - Printing system adjustment method for matching color characterization data sets tiondata) Note. CY/T 128-2015 Printing technology - Printing system adjustment method for matching color characterization data sets (ISO/T S10128.2009, IDT) ISO 12647-7 Graphic technology - Process control for halftone separations, proofs and production prints - Part 7: Direct from Note. GB/T 17934.7-2021 Printing technology - Process control of halftone color separations, samples and production prints - Part 7: Direct from digital Data proofing process (ISO 12647-7:2016, IDT) ISO 13468-1 Plastics-Determination of total light