



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

GB/T 17934.5-2021

**Graphic technology - Process control for the production of
half-tone colour separations, proofs and production prints -
Part 5: Screen printing**

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Standardization Administration**

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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 of Standardization Documents"

drafted:

This document is part 5 of GB/T 17934 "Printing Technology Mesh Color Separation Plates, Proofs and Process Control of Production Printed Matters"

point: GB/T 17934 has published the following parts:

- Part 1: Parameters and measurement methods;
- Part 2: Lithographic offset printing;
- Part 3: Newsprint coldset offset lithography;
- Part 5: Screen printing;
- Part 6: Flexographic printing;
- Part 7: Proofing process using digital data directly;
- Part 8: Verification print production process using digital data directly;

This document replaces GB/T 17934:5-2012 "Process control of printing technology halftone color separation films, proofs and printed products"

Part 5: Screen Printing", compared with GB/T 17934:5-2012, except for structural adjustment and editorial changes, the main technical changes are as follows:

a) The requirements for substrate, ink curing color, tone reproduction range, tone value increase, etc: have been deleted (see 4:3:1 and:2012 edition):

4:3:2);

b) Added digital file delivery and plate quality requirements (see 4:1:1);

- c) The requirement for the sum of tone values is deleted (see 4:2:6 of the:2012 edition);
- d) Modified the calculation benchmark of image position tolerance, and changed the color separation sheet to grid width (see 4:3:2);
- e) Appendix A is deleted (see Appendix A of the:2012 edition);
- f) Added Appendix A "Example of Process Measurement and Control Strip", Appendix B "Colorimetric Data Correction of Substrate Color Change" and Appendix C "Different Colors"

Solid Patch Target Values for Domain Type Inks" (see appendix):

This document is identical to ISO 12647-5:2015 "Printing Technology Mesh Tone Color Separation Plates, Proofs and Process Control of Production Prints"

Part 5: Screen Printing:"

Please note that some content of this document may be patented: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

This series of documents establishes process control parameters and their target and tolerance values for the most important professional printing processes in the printing industry: This article

Pieces that require printed product colors to match a characteristic data set or to match printing conditions agreed upon by the producer and recipient, and specify communication and production

Minimum requirements and tolerances in production: Specific parameters that may affect the final result (screen angle, resolution, screen mesh) are also provided:

Specifications and Tolerances:

This document is part 5 of GB/T 17934 "Printing Technology Mesh Color Separation Plates, Proofs and Process Control of Production Printed Matters"

point: GB/T 17934 is intended to consist of eight parts:

- Part 1: Parameters and measurement methods;
- Part 2: Lithographic offset printing;
- 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 print production process using digital data directly:

Since products produced by screen printing can vary widely in size and viewing distance, as part of the screening and resolution requirements, both

The viewing distance parameter is included:

Printing Technology Mesh Toning Separations, Proofs and Production

Process Control of Printed Matter

Part 5: Screen Printing

1 Scope

This document specifies the requirements for four-color process screen printing using flat or cylinder printing equipment for displays, signage and graphics: finished product

The size and resolution are not limited: Process stages include:

--- data preparation and provision;

---Proofing;

--- Printing plate making;

---print:

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to

this document:

GB/T 17934:1-2021 Printing Technology Mesh Tone Color Separation Plates, Proofs and Process Control of Production Printed Matters Part 1

Part: Parameters and Measurement Methods (ISO 12647-1:2013, IDT)

GB/T 17934:7-2021 Printing Technology Mesh Tone Color Separation Plates, Proofs and Process Control of Production Printed Matters Part 7

Sub: Proofing process using digital data directly (ISO 12647-7:2016, IDT)

GB/T 17934:8-2021 Printing Technology Mesh Tone Color Separation Plates, Proofs and Process Control of Production Printed Matters Part 8

Sub: Authenticated print production process using digital data directly (ISO 12647-8:2012, IDT)

ISO 12639 Printing Technology Prepress Digital Data Interchange Label Image File Format for Graphic Technology [TIFF/IT)

(Graphicstechnology-Prepressdigitaldataexchange-Tagimagefileformatforimagetechnology (TIFF/IT)]

Note: GB/T 22113-2008 Printing Technology Prepress Data Interchange Label Image File Format for Image Technology (TIFF/IT) (ISO 12639:

2004, ISO 12639:2004, IDT)

ISO 13655:2009 Printing technology Spectral measurement and colorimetric calculation of printed images (Graphicstechnology-Spectral

measurementandcolorimetriccomputationforgraphicartsimages)

Note: GB/T 19437-2004 Spectral measurement and chromaticity calculation of printed images in printing technology (ISO 13655:1996, IDT)

ISO 15930-1 Printing technology Prepress digital data exchange PDF use Part 1: Complete use of CMYK data

Exchange [PDF/X-1 and PDF/X-1a)

[Graphicstechnology-Prepressdigitaldataexchange-UseofPDF-

Part 1:CompleteexchangeusingCMYKdata(PDF/X-1andPDF/X-1a)]

Note: GB/T 27935:1-2016 Printing Technology Prepress Data Interchange PDF Use Part 1: Complete Data Interchange Using CMYK Data

Exchange (PDF/X-1 and PDF/X-1a) (ISO 15930-1:2001, IDT)

3 Terms and Definitions

The terms and definitions defined in GB/T 17934:1 apply to this document: