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

GB/T 47252.1-2026

**Printed electronics - Requirements for reproducibility of
printability - Part 1: Basic patterns for evaluation of printing
machine**

印刷电子 印刷适性的再现性要求 第1部分：印刷机评估的基本图案
(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 1 of GB/T 47252 "Reproducibility requirements for printability of electronic components". GB/T 47252 has been published.

The following parts were included.

---Part 1: Basic Patterns for Printing Press Evaluation this document is equivalent to IEC 62899-403-1:2018 "Printed electronics - Part 403-1. Requirements for printability and reproducibility".

The basic pattern of machine evaluation.

The following minimal editorial changes have been made to this document.

---To harmonize with existing standards, the standard title has been changed to "Reproducibility requirements for print electronics - Part 1: Printing presses".

The basic pattern of the assessment.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Printing Machinery (SAC/TC192).

Introduction

GB/T 47252 contains basic patterns for evaluating printability in printing presses, plate making, and printed electronics applications. The definition of printability...

The quality of printed patterns and the reproducibility of printed designs are the result of the interaction between the printing medium, ink, and substrate.

GB/T 47252 provides commonly used design patterns for evaluating printability. Two-dimensional or three-dimensional patterns are evaluated using mechanical, physical, or optical instruments.

Precise measurements are taken to ensure the quality of the printed design. The reproducibility of the printed design is achieved by evaluating the reproducibility of the reproduction.

The IEC 62899-402 series of documents played a crucial role in standardizing the measurement methods for these printed patterns, while GB/T 47252...

It plays a key role in the standardization of pattern reproducibility assessment. GB/T 47252 is proposed to consist of two parts.

---Part 1: Basic Patterns for Printing Press Evaluation. The purpose is to establish basic patterns applicable to evaluating the printability of printing presses.

---Part 2: Basic Patterns of Printing Plates. The purpose is to establish basic patterns suitable for evaluating the printability of printing plates.

In the commercial sector, industry demands the application of printing technology in the manufacture of electronic products, which ensures the quality and reproducibility of printed electronic products.

Sexuality helps promote international trade and increase user value.

Reproducibility requirements for printed electronic printing Part 1: Basic Patterns for Printing Press Evaluation

1 Scope

This document specifies commonly used basic design patterns for evaluating the pattern reproduction of printing presses from the perspective of printability in the printed electronics field.

Sex. These basic patterns include several evaluation patterns and registration marks.

Printability is determined by evaluating the reproducibility of these printed patterns produced by the printing press.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

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

This document.

Note: GB/T 321 Preferred Numbers and Preferred Number Systems (GB/T 321-2005, ISO 3:1973, IDT) IEC 62899-402 (all parts) Printed electronics - Part 402-X. Measurement of printability quality

3 Terms and Definitions

The terms and definitions defined in IEC 60050 (all parts) and the following terms and definitions apply to this document.

basic pattern

A two-dimensional graphic set consisting of evaluation patterns and registration marks is used to check the reproducibility of printed patterns.

Evaluation pattern

A set of basic graphics for evaluating the printability of printed electronics printers.

Register mark

A set of corresponding markers.

Printed pattern

Machine-printed patterns.

machine direction

The direction in which the substrate is conveyed by the printing press or coating machine.