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Graphic technology — **Laboratory preparation of test prints** —

Part 1: **Paste inks**

Technologie graphique — Préparation en laboratoire des impressions d'essai —

Partie 1: Encres compactes



ISO 2834-1:2020(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 130, *Graphic technology*.

This second edition cancels and replaces the first edition (ISO 2834-1:2006), which has been technically revised.

The main changes compared to the previous edition are as follows.

- The document has been rewritten to a general procedure for prints on many substrates for the use by several standards which require a well-defined print.
- The instruments and materials required for tests are specified, only electrically driven instruments are now included.
- A detailed procedure for conditioning and test execution is provided.
- Annexes are added regarding reference materials, preparation of rubber rollers and maintenance of elastomer rollers.

A list of all parts in the ISO 2834 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document exclusively describes the laboratory test print preparation for paste inks. The methods described in this document can be used in several other International Standards, such as ISO 2846-1, ISO 2846-2 and ISO 2836, and will be the basis for several printability standards to be developed by ISO/TC 6/SC 2 with TC 130. This document provides the tools to make uniform prints with a well-defined ink film thickness which can be used for analysis of the printed surface properties, fastnesses and which can be used for subsequent tests on the substrate or the printed image.

This document describes the procedure to be adopted when using IGT-type and prüfbau-type printability testers to prepare prints on papers, boards, metals, foils and other suitable substrates, for the main targets: reference optical density and reference ink film in g/m^2 on the substrate. Other inks, such as liquid inks for gravure or flexographical printing specified in ISO 2834-2 and screen print ink specified in ISO 2834-3, are developed with a similar structure to this document.

In this method, a procedure has been added to perform a periodic test with reference material to check deterioration of the used materials like rubbers and inks.