
**Graphic technology — Guidelines for
schema writers —**

**Part 1:
Packaging printing**



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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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*.

A list of all parts in the ISO 19303 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

Packaging brand owners and procurement teams are experts in their products and are often not experts in printing technology. This document is intended to be used as a tool to develop global and technically consistent requirements by, for example, certification bodies certifying packaging, national certification groups, trade associations, or brand owners to communicate their expectations throughout the supply chain.

This document recognizes a set of best practices and International Standards related to packaging printing. This document points to those International Standards to align requirements defined inside schemes used in certification programs. See the Bibliography for the list of these International Standards. Packaging and packaging graphics have a significant influence on the consumer buying decision. The packaging printing industry is made up of a large supply chain with many workflows, which produce a variety of printed products.

To ensure tone and colour reproduction quality, many ISO TC 130 standards specify the aims and tolerances that are necessary for the implementation of colour-managed workflows. Even though technical standards specify aims and tolerances, the printer's ability to demonstrate conformity of his production workflow to these standards is both a technical issue and a conformity assessment issue.

The packaging printing industry has unique technical and conformity assessment requirements that are common to its stakeholders.

Certification schemes are developed by certification bodies, such as national certification groups, trade associations, or brand owners, to address market needs. They are regional, workflow-dependent, and with varying technical requirements. This document provides technical and conformity assessment to allow that the various certifications are based on common principles and are comparable. As such, this document enables the individual organizations to more readily agree to mutual recognition of the certifications of other bodies as well as enable international trade organizations to identify comparable competencies on a worldwide basis.

This document provides a framework for typical packaging printing workflow, either using CMYK, CMYK with spot colour, non-CMYK, spot colour only, and multi-colour printing. It also provides a corpus of International Standards, including aims, tolerances, and test methods, applicable at each stage of packaging printing workflow. In addition, supply chain communication guidelines and process-dependent checklists are also included in this document.

This document is also intended to aid the following stakeholders in understanding packaging printing conformity assessment at an international level.

- Print buyers and brand owners
- Printing associations
- Printing organizations
- Printing production personnel
- Printing equipment manufacturers and suppliers
- Printing professionals, including auditors, consultants, etc.

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Part 1: Packaging printing

1 Scope

This document provides recommended guidelines for the evaluation of colour reproduction capability in the printing of packaging materials. It provides a basis for the development of colour certification schemes by individual brand owners and/or industry associations and for the evaluation of printed results against those schemes.

Because the package printing supply chain involves multiple partners, both the potential impact of each partner on the overall colour control and the individual responsibilities of each partner are identified in this document. The unique requirements of the individual reproduction processes and their impact on colour reproduction are also identified.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 19302, *Graphic technology — Colour conformity of printing workflows*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 19302 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

actual printing condition

APC

condition of the actual system printing the job defined by colourimetric and/or densitometric parameters

3.2

comp

proof formed to the shape of the final productNote 1 to entry: It is also called mock up.

3.3

certificate of conformance

CoC

document that certifies that the supplied services or goods meet the required specifications

Note 1 to entry: The CoC is normally issued by a recognized authority and is also known as a certificate of compliance.