Australian Standard®

Graphic technology—Process control for the production of half-tone colour separations, proofs and production prints

Part 3: Coldset offset lithography on newsprint

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The following are represented on Committee EX-004:

- Australian Paper Industry
- Lithographic Institute of Australia, NSW
- Printing Industries Association of Australia
- TAFE NSW

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PREFACE

This Standard was prepared by the Standards Australia Committee EX-004, Graphic Technology.

The objective of this Standard is to list and explain the minimum set of process parameters required to uniquely define the visual characteristics and related technical properties of a half-tone proof or production print produced by coldset offset lithography on newsprint, or half-tone proof designed to simulate this, from a set of half-tone separation films.

This Standard is identical with, and has been reproduced from ISO 12647-3:2005, *Graphic technology—Process control for the production of half-tone colour separations, proofs and production prints—Part 3: Coldset offset lithography on newsprint.*

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number appears on the cover, title page and each page, while the International Standard number appears only on the cover.

(b) In the source text 'this part of ISO 12647' should read 'this Australian Standard'.

(c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS ISO	
12647	Graphic technology—Process control for the production of half-tone colour separations, proof and production prints	12647	Graphic technology—Process control for the production of half-tone colour separations, proof and production prints
12647-1	Part 1: Parameters and measurement methods	12647.1	Part 1: Parameters and measurement methods

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' annex is only for information and guidance.

CONTENTS

INTRODUCTION

When producing a half-tone colour reproduction it is important that the colour separator, proofer and printer have previously specified a minimum set of parameters that uniquely define the visual characteristics and other technical properties of the planned print product. Such an agreement enables the correct production of suitable separations (without recourse to “trial-and-error") and subsequent production of off-press or on-press proof prints from these separations whose purpose is to simulate the visual characteristics of the finished print product as closely as possible.

For more information on the technical background refer to ISO 12647-1.

It is the purpose of this part of ISO 12647 to list and explain the minimum set of process parameters required to uniquely define the visual characteristics and related technical properties of a half-tone proof or production print produced by coldset offset lithography on newsprint, or half-tone proof designed to simulate this, from a set of half-tone separation films.

It is a further purpose of this part of ISO 12647 to list values or sets of values of the primary parameters specified in ISO 12647-1 and related technical properties of a half-tone newspaper print or proof produced from a set of half-tone colour separation films. Where deemed useful, secondary parameters are also recommended for specification.

Since non-periodic screening and direct-to-plate techniques are common practice within newspaper printing, information on some of the pertinent parameters has been included.

AUSTRALIAN STANDARD

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Part 3:
Coldset offset lithography on newsprint

1 Scope

This part of ISO 12647 specifies a number of process parameters and their values to be applied when preparing colour separations for newspaper single or four-colour printing and proofing. The parameters and values are chosen in consideration of the complete process, covering the process stages: "colour separation", "film setting", "making of the printing forme", "proof production" and "production printing".

This part of ISO 12647 is applicable:

— to coldset offset proof and production printing and off-press proof printing processes on newsprint that use colour separation films rather than digital data;

— by analogy to press printing from printing surfaces produced by direct imaging methods and the corresponding proof printing processes.

— It is not applicable:

— to line screens and non-periodic screens although certain parameters given can be applied by analogy. In particular, the tone value increases specified, apply directly because they refer to control patches that contain periodic screen half-tones;

— to flexo and letterpress production printing although a number of parameters can be applied by analogy.

2 Normative references

The following referenced documents are indispensable for the application 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 5-3, *Photography — Density measurements — Part 3: Spectral conditions*

ISO 8254-1, *Paper and board — Measurement of specular gloss — Part 1: 75 degree gloss with a converging beam, TAPPI method*

ISO 12647-1:2004, *Graphic technology — Process control for the production of half-tone colour separations, proof and production prints — Part 1: Parameters and measurement methods*

ISO 15930-4, *Graphic technology — Prepress digital data exchange using PDF — Part 4: Complete exchange of CMYK and spot colour printing data using PDF 1.4 (PDF/X-1a)*

ISO 15930-6, *Graphic technology — Prepress digital data exchange using PDF — Part 6: Complete exchange of printing data suitable for colour-managed workflows using PDF 1.4 (PDF/X-3)*

