BSI Standards Publication

Physical attributes of documents for microfilming or scanning – Code of practice

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Contents

Summary of pages

This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 6, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard was published by BSI and came into effect on 30 November 2008. It was prepared by Subcommitee IDT/1/2, *Document management applications – Application issues*, under the authority of Technical Committee IDT/1, *Document management applications*.

A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 5444:1977, which is withdrawn.

Information about this document

This new edition represents a full revision of the standard and reflects changes in dissemination and storage practices for documentary information. Reference is no longer made to research and development reports or technical manuals on microfiche. Recommendations have been modified to take account of scanning for capture in digital form.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Introduction

Document management systems often require original documents to be scanned for storage in digital form or microfilmed. For accurate capture of information from the original it is important that criteria for the quality of their characteristics are met. Originators of documents are strongly advised to take account of these criteria.

Some scanners can accurately capture typescript smaller than is possible for microfilm. As this standard addresses the quality of documents that can be captured by either or both of these processes, type size is dictated by microfilming.

1 Scope

This British Standard gives recommendations for the physical characteristics of original documents that might need to be microfilmed in accordance with BS ISO 6199 or scanned at a resolution of not less than 200 dots per inch. It applies to hard-copy originals and those computer generated for output on microfilm. For the latter, recommendations for print quality and post-printing feature do not apply. It applies to forms but not those intended for electronic processing of user-completed information.

NOTE   1 inch = 25.4 mm.

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.

BS ISO 6196, *Micrographics – Vocabulary*

BS ISO 12651, *Electronic imaging – Vocabulary*

3 Terms and definitions

For the purposes of this British Standard the terms and definitions given in BS ISO 6196 and BS ISO 12651 together with the following apply.

3.1 continuous-tone illustration
original in which gradations in tone or colour are produced by continuously variable density of colour

NOTE   A photograph or wash drawing is an example.

3.2 half-tone
simulation of continuous tone produced by a series of dots varying in size and colour according to the tonal values of the original

3.3 highlighting
printed feature of a document intended to draw attention to a particular area within the document

3.4   **landscape**
description of a page or illustration designed to be read with the longer edge toward the reader

3.5   **line-tone**
simulation of continuous tone by a pattern of lines

3.6   **portrait**
description of a page or illustration designed to be read with the shorter edge toward the reader

3.7   **rule**
horizontal or vertical line used to separate information

4   Page format and content

4.1   Page mode

Documents can be produced entirely on portrait pages, entirely on landscape pages or on a mixture of both.

4.2   Page size

Documents should be produced on A4-size paper or landscape A3. Portrait A3 should not be used. Other sizes might be acceptable but the shorter sides of any document should be not greater that 297 mm.

NOTE 1   Documents can be produced entirely on portrait pages, entirely on landscape pages or on a mixture of both.

NOTE 2   Documents smaller than A5 might require specialist scanners or more stringent scanning procedures.

4.3   Margins

Margins should be not less than 10 mm all round. If the document is to be in bound form the margin at the binding edge should be not less than 25 mm.

4.4   Typeface

4.4.1   Style

Serif type should not vary greatly from sanserif forms. Typefaces with ornate, condensed or narrow characters should not be used.

NOTE 1   Sanserif typefaces of predominantly regular weight are preferred. However, it is recognized that for documents intended principally to be eye-read serif type can be used for aesthetic reasons.

NOTE 2   Bar codes and MICR font E-13B can be used.

4.4.2 Size

The height of upper case characters should be not less than 2.7 mm. As computers give type size in points, a rather imprecise measurement, rather than millimetres, to ensure compliance with the minimum height recommended 12 point should be used.

4.5 Spacing

The minimum space between adjacent characters should be not less than the width of a vertical stroke in the characters. The space between two consecutive base lines of text should be not be less than 1.5 times the vertical height of an upper case letter.

4.6 Rules

Line thickness should be not less than 0.7 mm. All lines should be parallel to an edge of the page.

4.7 Highlighting

Areas of black or colour used for highlighting parts of the document should not be in the form of solids; half-tone or line-tone areas should be used.

4.8 Reversed print

Reversed print, where characters appear clear within a coloured background, should not be used.

4.9 Bar codes

A bar code should be surrounded by a clear area and an eye-readable version of what the code represents should be printed above or below the code.

5 Illustrations

NOTE   Illustrations include line diagrams, pictures, tables, graphs and charts.

5.1 Position

Illustrations should, if possible, be placed so that they can be seen at the same time as the related text and should be repeated if necessary to accomplish this. If they cannot be accommodated on the same page as the related text they should be on the following page.

NOTE   The frequency of repetition depends on the frequency of references to the illustration in the text.

5.2 Orientation

Illustrations should be upright and right-reading in relation to the main text.

5.3 Line diagrams

Diagrams should be as simple as the matter permits. Lines should be not less than 0.25 mm wide. Parallel and concentric lines should be separated by a space not less than the line width or the average width if the lines differ in width, provided that the space is at least 0.5 mm.

5.4 Pictorial illustrations

Continuous-tone illustrations should not be used. Illustrations should be in the form of half-tone or line-tone prints.

6 Print quality

Documents should preferably be printed on white or near-white paper of matt or MF (machine finished) grade, of grammage 80 gm^{-2} to 100 gm^{-2} and opacity sufficient to prevent obtrusive show-through. When two sheets of the paper to be used are placed over a sheet of paper with an area of dense black typescript, e.g. dry transfer lettering, the typescript should not be visible through the two sheets if it is suitable for the purposes of this standard.

NOTE 1   Pale coloured paper can be used provided sufficient contrast is maintained between information and background.

The printed matter should be sharp, of even density and with minimum contrast of 1.0. Blue-green should be avoided as microfilm is not sensitive to that colour and it should be appreciated that essential information printed in colour cannot be captured by scanning as scanners vary in spectral sensitivity.

NOTE 2   Black ink is preferred but coloured inks can be used.

7 Supplementary features

NOTE   Supplementary features can adversely affect equipment with automatic feed mechanisms and it is important to control these in order to minimize the risk.

7.1 Perforations

Only slit perforations should be used.

7.2 Holes

Holes should be cleanly punched in a margin with centres not less than 12.5 mm from the printed matter.

7.3 Folds

Not more than two folds should be allowed on a document. All folds should be parallel with the machine direction of the paper and positioned not less than 6.5 mm from any printed matter.

7.4 Padding

A low-tack, flexible, high solids adhesive should be used for padding documents.

7.5 Carbonizing

Wax-based carbon compound should not be used. Where required, black chemically or physically mated carbonless products should be used.

Bibliography

Standards publications

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS ISO 6199, *Micrographics – Microfilming of documents on 16 mm and 35 mm silver-gelatin type microfilm – Operating procedures*

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