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BS ISO/IEC 29142-1:2013

BSI Standards Publication

Information technology — Print cartridge characterization

Part 1: General: terms, symbols, notations and cartridge characterization framework

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 29142-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 28, *Office equipment*.

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Introduction

The purpose of this part of ISO/IEC 29142 is to define the framework for characterizing ink and toner cartridges used in printing devices that have a digital input printing path, including multi-function devices. This part of ISO/IEC 29142 defines terms, symbols, and notations used throughout the ISO/IEC 29142 series to characterize such ink and toner cartridges.

Customer information related to ink and toner cartridges is not consistent in the global marketplace.

Cartridge manufacturers, including original, non-original manufacturers, refillers, and remanufacturers, have each communicated expressions of cartridge characteristics.

The ISO/IEC 29142 series is provided to aid transparency between manufacturers, suppliers and their customers regarding selected cartridge characteristics. The selected cartridge characteristics do not provide for an exhaustive cartridge characterization. Where applicable, cartridge attributes and the associated characterization tests are used consistently with both ink and toner cartridge technologies. The selected cartridge attributes are defined for all cartridges, regardless of manufacturing methodology.

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Information technology — Print cartridge characterization —

Part 1: General: terms, symbols, notations and cartridge characterization framework

1 Scope

This part of ISO/IEC 29142 establishes terms, symbols, notations and a framework for characterizing toner and ink cartridges used in printing devices that have a digital input printing path, including multi-function devices. This part of ISO/IEC 29142 is intended for equipment used in office environments.

It primarily provides a foundation for measuring, evaluating, or specifying characteristics of such toner and ink cartridges.

The terms, symbols, notations and framework established herein can be applied to such cartridges.

The characterizations associated with the terms, symbols, notations, and framework established herein are specified throughout the ISO/IEC 29142 series.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 13655, *Graphic technology — Spectral measurement and colorimetric computation for graphic arts images*

ISO 5-3, *Photography and graphic technology — Density measurements — Part 3: Spectral conditions*

ISO/IEC 29142-2, *Information technology — Print cartridge characterization — Part 2: Cartridge characterization data reporting*

ISO/IEC 29142-3, *Information technology — Print cartridge characterization — Part 3: Environment*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
all-in-one toner cartridge
cartridge that includes at least: a toner containment part, a photoreceptor part, and a developer part

3.2
black-only printer
printer with an operating part to apply ink or toner on a substrate with functionality limited to print output using only a single black colourant

Note 1 to entry: In the case of a printer capable to operate with only a black colourant cartridge and alternatively to operate with other cartridge configurations that include other colourants, the black-only printer condition is limited to when only the single black colourant cartridge is installed.

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