INTERNATIONAL STANDARD

ISO 12643-4

First edition
2010-03-01

Graphic technology — Safety requirements for graphic technology equipment and systems —

Part 4: Converting equipment and systems

Technologie graphique — Exigences de sécurité pour les systèmes et l'équipement de technologie graphique —

Partie 4: Systèmes et équipement de façonnage

Reference number
ISO 12643-4:2010(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

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.

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

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

ISO 12643-4 was prepared by Technical Committee ISO/TC 130, *Graphic technology*.

It is the intent of ISO/TC 130 that this first edition of ISO 12643-4 become applicable to new equipment manufactured from 2011-01-01.

ISO 12643 consists of the following parts, under the general title *Graphic technology — Safety requirements for graphic technology equipment and systems*:

— *Part 1: General requirements*

— *Part 2: Prepress and press equipment and systems*

— *Part 3: Binding and finishing equipment and systems*

— *Part 4: Converting equipment and systems*

— *Part 5: Stand-alone platen presses*

Introduction

The purpose of this part of ISO 12643 is to reduce the risk of injury to operating personnel working on converting equipment.

This part of ISO 12643 provides requirements for the design and construction of converting equipment used in the package printing, converting and graphic technology industries. It covers equipment not addressed by the other parts of ISO 12643. It is intended to be used in conjunction with ISO 12643-1 and provides additional requirements that are specific to converting equipment.

During the development of this part of ISO 12643, existing relevant standards of other countries were taken into consideration. An effort has been made to take into consideration the requirements of many countries, recognizing that national standards or laws may dictate national requirements. Cases where a national requirement was known to differ from this part of ISO 12643 have been noted.

This part of ISO 12643 was developed to harmonize the following US and European safety standards:

ANSI/PMMI B155.1, *Safety Requirements for Packaging Machinery and Packaging-Related Converting Machinery*

EN 1010-4, *Safety of machinery — Safety requirements for the design and construction of printing and paper converting machines — Part 4: Bookbinding, paper converting and finishing machines*

EN 1010-5, *Safety of machinery — Safety requirements for the design and construction of printing and paper converting machines — Part 5: Machines for the production of corrugated board and machines for the conversion of flat and corrugated board*

Graphic technology — Safety requirements for graphic technology equipment and systems —

Part 4: Converting equipment and systems

1 Scope

This part of ISO 12643 provides safety requirements for the design and construction of converting equipment used in the package printing, converting and graphic technology industries. It is applicable to converting equipment not covered by other parts of ISO 12643. It is intended to be used in conjunction with the general requirements given in ISO 12643-1.

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 12643-1, *Graphic technology — Safety requirements for graphic technology equipment and systems — Part 1: General requirements*

ISO 13732-1, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces*

ISO 13849-1, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

ISO 13850, *Safety of machinery — Emergency stop — Principles for design*

ISO 13855, *Safety of machinery — Positioning of protective equipment with respect to the approach speeds of parts of the human body*

ISO 13857, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 14119, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

ISO 14122-3, *Safety of machinery — Permanent means of access to machinery — Part 3: Stairs, stepladders and guard-rails*

IEC 60529, *Degrees of protection provided by enclosures (IP code)*

IEC 62061, *Safety of machinery — Functional safety of safety-related electrical, electronic and programmable electronic control systems*

EN 619, *Continuous handling equipment and systems — Safety and EMC requirements for equipment for mechanical handling of unit loads*