First edition 2007-03-01

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

Part 1: General requirements

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

Partie 1: Exigences générales



Reference number ISO 12643-1:2007(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

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

Forewordiv		
Introduction		v
1	Scope	1
2	Normative references	2
3	Terms and definitions	4
4	Effective date	11
5	Guarding of significant hazards	11
6	Requirements for protection against other hazards	30
7	Release from hazardous situation	42
8	Control zones	42
9	Controls	43
10	Control stations	53
11	Control systems	58
12	Ergonomics and labelling of indicators and actuators	60
13	Signals and warning devices	60
14	Warning signs and labels	63
15	Contents of instruction handbook	64
Annex	A (informative) Risk analysis relating to the pitch angle of access stairs	67
Annex	B (informative) Noise	69
Annex	C (normative) Area warning light system	71
Annex	D (informative) Example layout of instruction handbooks	73
Bibliog	raphy	75

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 12643-1 was prepared by Technical Committee ISO/TC 130, Graphic technology.

This first edition of ISO 12643-1, together with ISO 12643-2, cancels and replaces ISO 12648:2006, which has been technically revised. This edition of ISO 12643-1, together with ISO 12643-3, cancels and replaces ISO 12649:2004, which has been technically revised.

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: Press equipment and systems
- Part 3: Binding and finishing equipment

Introduction

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. In cases where it was known that there is a national requirement that differs from this part of ISO 12643, that has been noted.

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

- ANSI B65.1, Graphic technology Safety standard Printing press systems;
- ANSI B65.2, Binding and Finishing Systems;
- ANSI B65.3, Safety standard Guillotine paper cutters, mill trimmers, and integral handling equipment;
- ANSI B65.4, Safety standard Three-knife trimmers, including rotary, and single- and multiple-knife trimmers;
- EN 1010-1, Safety of machinery Safety requirements for the design and construction of printing and paper converting machines — Part 1: Common requirements;
- EN 1010-2, Safety of machinery Safety requirements for the design and construction of printing and paper converting machines Part 2: Printing and varnishing machines including pre-press machinery;
- EN 1010-3, Safety of machinery Safety requirements for the design and construction of printing and paper converting machines — Part 3: Cutting machines;
- 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.