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Graphic technology - Safety requirements for graphic technology equipment and systems - Part 3: Binding and finishing equipment and systems (ISO 12643-3:2023)

Graphische Technik - Sicherheitsanforderungen an Ausrüstungen und Systeme der graphischen Technik - Teil 3: Ausrüstungen und Systeme in der Buchbinderei und Druckweiterverarbeitung (ISO 12643-3:2023)

Technologie graphique - Exigences de sécurité pour les systèmes et l'équipement de technologie graphique - Partie 3: Systèmes et équipement de reliure et de finissage (ISO 12643-3:2023)

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Technologie graphique - Exigences de sécurité pour les systèmes et l'équipement de technologie graphique - Partie 3: Systèmes et équipement de reliure et de finissage (ISO 12643-3:2023)

Graphische Technik - Sicherheitsanforderungen an Ausrüstungen und Systeme der graphischen Technik - Teil 3: Ausrüstungen und Systeme in der Buchbinderei und Druckweiterverarbeitung (ISO 12643-3:2023)

This European Standard was approved by CEN on 19 November 2023.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3

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European foreword

This document (EN ISO 12643-3:2023) has been prepared by Technical Committee ISO/TC 130 "Graphic technology" in collaboration with Technical Committee CEN/TC 198 "Printing and paper machinery - Safety" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2026.

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

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INTERNATIONAL
STANDARD

ISO
12643-3

Third edition
2023-11

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

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

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

Partie 3: Systèmes et équipement de reliure et de finissage

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
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Contents

Page

Foreword.....	v
Introduction.....	vii
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Significant hazards.....	4
5 Guarding of significant hazards.....	4
5.1 General.....	4
5.2 Interlocks.....	5
5.2.1 Interlocking with guard locking.....	5
5.2.2 Exception for machine motion at inching speed.....	6
5.2.3 Exception for machine motion at production speed.....	6
5.3 Guarding of hoppers and hopper feeders.....	6
5.3.1 Manually loaded hoppers.....	6
5.3.2 Guarding of automatically fed hoppers.....	6
5.3.3 Protection of unused hoppers and hopper feeders.....	7
5.3.4 Separating elements on hopper feeders.....	7
5.4 Guarding on binding and finishing machines.....	7
5.4.1 Hand-fed riveting, eyeletting and attaching machines.....	7
5.4.2 Hand-fed flat- and saddle-stitching machines.....	7
5.4.3 Gang stitchers and drum stitchers.....	8
5.4.4 Gathering machines.....	11
5.4.5 Perfect binders.....	13
5.4.6 Paper drills.....	15
5.4.7 Book signature presses.....	17
5.4.8 Book press.....	17
5.4.9 Sheet-folding machines.....	18
5.4.10 Book production lines for the production of hard-cover books.....	19
5.4.11 Back-rounding and pressing machines.....	20
5.4.12 Backlining and head-banding machines.....	20
5.4.13 Casing-in (case-binding) machines.....	21
5.4.14 Book-cover crease-forming machines (presses).....	23
5.5 Inserting and collating machines.....	23
5.6 Counter-stackers.....	23
5.6.1 Safeguarding divert gates (waste separator).....	23
5.6.2 Safeguarding hazard points at turntable.....	24
5.6.3 Pneumatic system.....	24
5.7 Paper-embossing machines.....	24
5.7.1 Safeguarding in-running nips on guide rollers.....	24
5.7.2 Stretch rollers and counter rollers.....	24
5.7.3 Safeguarding movement of counter roller.....	24
5.7.4 Insulation of heated parts.....	25
5.8 Finishing machines.....	25
5.8.1 Coaters.....	25
5.8.2 Laminators.....	27
5.9 Guillotine cutters.....	30
5.9.1 Knife cycles.....	30
5.9.2 Interruption of cutting cycles.....	31
5.9.3 Clamping.....	31
5.9.4 Failure of knife and clamp bar linkages.....	32
5.9.5 Backgauge.....	32
5.9.6 Guarding front (operating side) of a guillotine.....	34

ISO 12643-3:2023(E)

5.9.7	Pile-support angles (jogging blocks).....	38
5.9.8	Knife changing and adjustment.....	39
5.9.9	Hazards from integral feeding and delivery equipment on guillotine cutters.....	39
5.10	Trimmers and three knife trimmers.....	41
5.11	Three-knife trimmer with manual infeed.....	42
5.12	Inserters/attaching machines.....	43
5.13	Overcover/protective wrapper gluers.....	43
5.14	Corner-rounding machines.....	43
6	Verification of the safety requirements and/or protective/ risk reduction measures.....	44
7	Information for use — Contents of instruction handbook.....	47
7.1	Information for gang stitchers.....	47
7.2	Information for gathering machines.....	47
7.3	Information for perfect binders.....	47
7.4	Information for sheet folding machines.....	48
7.5	Information for inserting machines.....	48
7.6	Information for machines for the production of envelopes.....	48
7.7	Information for guillotine cutters.....	49
7.8	Information for integral feeding and delivery equipment for guillotine cutters.....	49
7.9	Information for trimmers.....	49
7.10	Information for corner-rounding machines.....	50
7.11	Information for contact with hot surfaces above 65 °C.....	50
Annex A	(normative) Safety distance of ESPDs on guillotine cutters and three knife trimmers with manual infeed — Formulae for the calculation of safety distance of ESPDs.....	51
Annex B	(informative) List of significant hazards.....	52
Bibliography	62

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 Document Preview

SIST EN ISO 12643-3:2024

<https://standards.iteh.ai/catalog/standards/sist/3a819876-b309-488d-9f16-f7acc425cb4a/sist-en-iso-12643-3-2024>

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 130, *Graphic technology*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 198, *Printing and paper machinery — Safety*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and the second edition (ISO 12643-3:2010), which has been technically revised.

The main changes are as follows:

- in [5.2](#), requirements for interlocks have been included (specific clause in ISO 12643-1 has been deleted);
- in [5.3.4](#), requirements for residual pile monitoring as a safety device on hopper feeders have been revised
- in [5.4.4](#), requirements on feeders and feeding sections at gathering machines have been added;
- in [5.4.4.4](#), requirements for residual pile monitoring as a safety device on feeders at gathering machines have been revised
- in [5.4.5](#), the requirements on safety-related control systems for temperature control and temperature monitoring in the gluing unit at perfect binders have been revised;
- in [5.4.5.7](#), requirements for safeguarding milling head cutters at perfect binders have been added;
- in [5.4.5.9](#), requirements for emergency stop at perfect binders have been added;
- requirements related to hazards dealt with in ISO 12643-1 have been deleted throughout the document (inclusion in the list of significant hazards);

ISO 12643-3:2023(E)

- in [5.4.5](#), the requirements on safety-related control systems for temperature control and temperature monitoring in the gluing section for hardcover lines have been revised;
- in [5.9.2](#), requirements for retraction of knife and clamp at guillotine cutters have been added;
- in [5.9.6](#); [Figures 29](#) and [30](#) on guillotine cutters have been revised (30 mm added)
- the formula for the calculation of the minimum safety distance at guillotine cutters has been moved to A.1 as it also refers to the new [subclause 5.11](#);
- a new [subclause 5.11](#), Three-knife trimmers with manual infeed, has been added;
- in [Clause 6](#), the table for the verification of the safety requirements and/or protective/risk reduction measures has been added;
- the list of significant hazards has been moved to [Annex B](#);
- a reference to ISO 13849-2 has been added in Bibliography.

This document is intended to be used in conjunction with ISO 12643-1:2023.

A list of all parts in the ISO 12643 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document is a type-C standard as stated in ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organisations, market surveillance, etc.)

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e. g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

During the development of this document, existing relevant standards of other countries were taken into consideration. In cases where it was known that there is a national requirement that differs from this document, that has been noted.

The full set of requirements for graphic technology equipment and systems are those given in the part of ISO 12643 applicable to that type, together with the relevant requirements from ISO 12643-1:2023, to the extent specified in the Scope of the applicable part of ISO 12643.

This document supplements and modifies the general requirements of ISO 12643-1:2023. Where a requirement of this document conflicts with a requirement of ISO 12643-1:2023 the requirement of this document will take precedence.

