BS EN ISO 12643-5:2023

BSI Standards Publication

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

Part 5: Manually-fed stand-alone platen presses

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# National foreword

This British Standard is the UK implementation of EN ISO 12643-5:2023. It is identical to ISO 12643-5:2023. It supersedes BS ISO 12643-5:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PAI/43, Graphic technology.

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

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English Version

# Graphic technology - Safety requirements for graphic technology equipment and systems - Part 5: Manually-fed stand-alone platen presses (ISO 12643-5:2023)

Technologie graphique - Exigences de sécurité pour les systèmes et l'équipement de technologie graphique - Partie 5: Presses à plateaux autonomes manuelles (ISO 12643-5:2023)

Graphische Technik - Sicherheitsanforderungen an Ausrüstungen und Systeme der graphischen Technik - Teil 5: Stand-alone-Stanztiegel mit manueller Anlage (ISO 12643-5:2023)

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

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## European foreword

This document (EN ISO 12643-5:2023) 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of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2026.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.

This document supersedes EN 1010-5:2005.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## Endorsement notice

The text of ISO 12643-5:2023 has been approved by CEN as EN ISO 12643-5:2023 without any modification.

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# 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).

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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 second edition cancels and replaces the first edition (ISO 12643-5:2010), which has been technically revised.

The main changes are as follows:

— in Clause 3, definitions for different operation modes (single stroke mode, dwell mode, continuous operation mode) have been added;

— in 4.2, figures showing examples for safeguarding side access have been included;

— in 4.3, the requirements for safeguarding access from the front side have been revised, differentiating the requirements for small platen presses with a platen table width less than or equal to 1 m and large ones with a platen table width wider than 1 m;

— in 4.4, requirements for the positioning of laser scanners have been included;

— in 4.5, requirements when using vision based protective devices (VBPD) for the detection of persons on the platen, including calculation of the safety distance have been included;

— in 4.6, the requirements for timer controlled operation have been revised;

— in 4.7, the requirements for stopping distance and performance have been revised;

— in Clause 6, requirements for the content of the instruction handbook have been added;


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— the list of significant hazards has been moved to an informative Annex A.

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.

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.

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.

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 the ISO 12643 series.

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.


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

## Part 5: Manually-fed stand-alone platen presses

## 1 Scope

This document provides safety requirements specific to stand-alone platen presses.

This document provides additional safety requirements for the design and construction of manually-fed stand-alone platen presses, for single stroke mode, dwell mode, and continuous operation mode for cutting and creasing, embossing, foil stamping and/or printing of paper, board and other materials processed in a similar manner.

This document does not apply to presses designed to handle metal material other than foil.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 4413:2010, *Hydraulic fluid power — General rules and safety requirements for systems and their components*

ISO 4414:2010, *Pneumatic fluid power — General rules and safety requirements for systems and their components*

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 12643-1:2023, *Graphic technology — Safety requirements for graphic technology equipment and systems — Part 1: General requirements*

ISO 13849-1:2023, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

ISO 13850:2015, *Safety of machinery — Emergency stop function — Principles for design*

ISO 13855:2010, *Safety of machinery — Positioning of safeguards with respect to the approach speeds of parts of the human body*

ISO 13856-2:2013, *Safety of machinery — Pressure-sensitive protective devices — Part 2: General principles for design and testing of pressure-sensitive edges and pressure-sensitive bars*

ISO 13857:2019, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 14120:2015, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

IEC 61496-1:2020, *Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests*

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