

ANSI®
B65-1:2011
(ISO 12643-1:2009 MOD)

AMERICAN NATIONAL STANDARD

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

SECRETARIAT
NPES THE ASSOCIATION FOR SUPPLIERS OF PRINTING, PUBLISHING
AND CONVERTING TECHNOLOGIES

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B65



AMERICAN NATIONAL STANDARD

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Foreword

B65-1 is a modified national adoption of ISO 12643-1:2009, *Graphic technology — Safety requirements for graphic technology equipment and systems — Part 1: General requirements*. The purpose of this adoption is to harmonize this ANSI standard with international standards to facilitate international trade while adhering to U.S. safety regulations.

For more than a decade, the B65 Committee has been working to support the development of international safety standards that harmonize the existing B65 safety requirements with the safety requirements of the European safety standards set forth in the EN 1010 series of standards. This work has resulted in the issuance of the ISO 12643 series of standards for graphic technology equipment.

The B65 Committee agreed the ISO work has since progressed to the point that it can be adopted to revise the various B65 standards, with a few modifications needed for the U.S. industry. To better align the B65 work with the ISO work, it was also agreed to restructure and renumber the B65 series of standards to better reflect this correlation. This results in a new B65 standard that specifies general requirements related to all equipment, supplemented by other parts that contain additional requirements for specific types of equipment. As a result, some of the B65 standards will carry a new designation. The table below identifies the general content of the current B65 standards and their correlation with both the previous versions and with the ISO standards.

Content	B65 standard prior to 2011	Current B65 standard	Current ISO standard
General requirements for all equipment	Did not exist as a stand-alone document. Requirements were contained in each individual standard.	B65-1	ISO 12643-1
Requirements for printing press equipment and systems	B65.1	B65-2	ISO 12643-2
Requirements for binding and finishing equipment	B65.2	B65-3*	ISO 12643-3
Requirements for guillotine cutters	B65.3*	Requirements included in B65-3	Requirements included in ISO 12643-3
Requirements for three-knife trimmers, including rotary and single- and multiple-knife trimmers	B65.4*	Requirements included in B65-3	Requirements included in ISO 12643-3
Requirements for stand-alone platen presses	B65.5	B65-5	ISO 12643-5
* B65 standards containing specific requirements for guillotine cutters (B65.3) and three-knife trimmers (B65.4) have been withdrawn. The requirements for this equipment are now included in B65-3.			

Although previous versions of the B65 standards have been withdrawn and replaced by the current versions, copies of withdrawn versions are kept on file and are available from NPES.

This standard was prepared by B65 Subcommittee 0 (General Safety Requirements) and was processed and approved for submittal to ANSI by the members of the subcommittee. Committee approval of the standard does not necessarily imply that all committee members voted for its approval.

The development of B65-1 was undertaken as part of an overall process to revise the B65 standards that relate to ISO 12643, and to adopt the multi-part standard format of the ISO 12643 series. This will result in the general requirements that apply to the machinery covered by other B65 standards being contained in B65-1. Other standards in the B65 series will contain additional requirements or exceptions that are specific to the machinery covered by that standard. Areas in which B65-1 differs technically from ISO 12643-1:2009 are noted throughout the document and are identified in detail in Annexes E and S. Other editorial changes have been made that do not affect the technical content of the standard.

It is the intent of the committee that this edition of B65-1 and the comparable requirements of B65.1-2005, B65.2-2005, B65.3-2001, B65.4-2002 and B65.5-2006 will be applicable through December 31, 2012. Thus, those standards will be provisionally retained until that date. As from January 1, 2013, only B65-1:2011, B65-2:2011, B65-3:2011, and B65-5:2011 will be applicable to new equipment.

The B65 series of standards to which B65-1 relates are the following:

- B65-2, *Graphic technology — Safety requirements for graphic technology equipment and systems — Part 2: Prepress and press equipment and systems*
- B65-3, *Graphic technology — Safety requirements for graphic technology equipment and systems — Part 3: Binding and finishing equipment and systems*
- B65-5, *Graphic technology — Safety requirements for graphic technology equipment and systems — Part 5: Stand-alone platen presses*

The B65 Committee was accredited by the American National Standards Institute in 1983 to develop safety standards for the printing and publishing industry.

The B65 Committee recommends the voluntary adoption and use of this standard by the printing industry and its suppliers. It is hoped that individual companies will not only use it in the purchase of new equipment, but will also apply the requirements of this standard during any major change or alternation of existing equipment.

It is recommended that this standard, or applicable parts of it, be referenced in purchase orders for equipment, when appropriate, thus making its provisions a part of the purchase contract. It is also recommended that this standard be a part of the total safety program in the workplace. Application of this standard will promote safety, and management at all levels is urged to recommend its implementation.

Requests for interpretation must be sent in writing to the B65 Secretariat. This request will be forwarded to the appropriate committee, which will review the request in accordance with the B65 Committee Procedures for Interpretations and will provide a written response. A statement, written or oral, that is not processed in accordance with the procedures noted above will not be considered the official position of the B65 Committee, and should not be relied upon as a Formal Interpretation.

Suggestions for improving this standard are welcome. They should be sent to the B65 Secretariat, NPES The Association for Suppliers of Printing, Publishing and Converting Technologies, 1899 Preston White Drive, Reston, VA 20191-4367.

Introduction

During the development of this B65 Standard an effort was made to harmonize the requirements of ISO 12643-1:2009, with the requirements of the series of B65 standards. Therefore, this version of B65-1 is an adoption of ISO 12643-1:2009, **modified with specific requirements for the U.S., which are noted throughout this document and are listed in Annexes E and S.** Such requirements may be an addition to, or a deviation from, the requirements of ISO 12643-1:2009. In addition to the modifications of ISO 12643-1:2009 shown in Annexes E and S, other editorial changes have been made to the standard in accordance with the formatting requirements of an ANSI standard. Such editorial changes have no impact on the requirements of this standard. One notable editorial change is that references to other parts of the ISO 12643 series have been replaced with references to the appropriate part of the B65 series.

During the development of ISO 12643-1, 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.

ISO 12643-1 was developed to harmonize the requirements of the following U.S. and European safety standards:

ANSI B65.1, *Graphic technology — Safety standard — Printing press systems;*

ANSI B65.2, *Graphic technology — Safety requirements for binding and finishing systems and equipment;*

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;*

ANSI B65.5, *Safety standard — Stand-alone platen presses*

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.*

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. Neither ISO, ANSI nor NPES shall be held responsible for identifying any or all such patent rights.

This is a preview of "ANSI B65-1:2011". [Click here to purchase the full version from the ANSI store.](#)

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

Part 1: General Requirements

1 Scope

This part of the B65 series of standards provides safety specifications for the design and construction of new equipment used in prepress systems, printing press systems, binding and finishing systems, converting systems and stand-alone platen presses. It is applicable to equipment used in stand-alone mode, or in combination with other machines, including ancillary equipment, in which all the machine actuators (e.g. drives) of the equipment are controlled by the same control system.

The requirements given in this standard are applicable to the equipment covered in the additional parts of the B65 series listed in the Foreword. This part of the B65 series of standards is to be used in conjunction with the applicable part of the B65 series that contains additional requirements specific to a particular type of equipment.

This standard addresses recognized significant hazards specific to equipment and systems in the following areas:

- mechanical;
- electrical;
- slipping, tripping, falling;
- ergonomics;
- noise;
- UV and laser radiation;
- fire and explosion;
- thermal;
- other types of emissions [e.g. ozone, ink mist, volatile organic compounds (VOCs), etc.].

The safety principles established in this standard can also be applicable to the design of equipment within areas of technology that are not specified in B65 standards.

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.

For additional normative references relating to U.S. requirements, see S.1.

ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs in workplaces and public areas*