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

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

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

Partie 2: Systèmes et équipement pour la préimpression et la presse



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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.

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 12643-2 was prepared by Technical Committee ISO/TC 130, *Graphic technology*.

This second edition of ISO 12643-2 constitutes a technical revision of the first edition (ISO 12643-2:2007). Significant changes incorporated into this second edition include, but are not limited to, the following:

- inclusion of prepress equipment;
- requirements for performance levels (PL) or safety integrity levels (SIL) as defined in the current version of ISO 13849-1 and IEC 62061, respectively;
- addition of requirements for printing plate changes;
- addition of requirements for emergency stop on auxiliary draw nips.

It is the intent of ISO/TC 130 that both the first and second editions of ISO 12643-2 be applicable until 2011-12-31. ISO 12643-2:2007 is thus provisionally retained until this date.

As from 2012-01-01, ISO 12643-2:2010 will cancel and replace ISO 12643-2:2007. Accordingly, as from 2012-01-01, only ISO 12643-2:2010 will be applicable to new equipment manufactured.

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

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 harmonize the requirements of all 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 requirements of the following US and European safety standards:

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

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

Part 2: Prepress and press equipment and systems

1 Scope

This part of ISO 12643 provides safety requirements specific to prepress and press equipment and systems. It is intended to be used in conjunction with the general requirements given in ISO 12643-1.

This part of ISO 12643 provides additional safety requirements for the design and construction of new prepress and press equipment, and the auxiliary equipment integrated into the press control system.

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 13855, *Safety of machinery — Positioning of safeguards 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*

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

EN 378-1, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 1: Basic requirements, definitions, classification and selection criteria*

EN 1539, *Dryers and ovens in which flammable substances are released — Safety requirements*