

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

**ग्राफिक प्रौद्योगिकी — ग्राफिक प्रौद्योगिकी उपकरण
और प्रणालियों हेतु सुरक्षा अपेक्षाएं
भाग 5 मैनुअल रूप से संचालित स्टैंड-अलोन प्लेटन प्रैसिस**

(ISO 12643-5 का पहला पुनरीक्षण)

Draft Indian Standard

**GRAPHIC TECHNOLOGY — SAFETY REQUIREMENTS
FOR GRAPHIC TECHNOLOGY EQUIPMENT AND SYSTEMS
PART 5 MANUALLY FED STAND – ALONE PLATEN PRESSES**

(First Revision of ISO 12643-5)

ICS 37.100.10

Printing Machinery Sectional
Committee, MED 25

Last date of comment is
07 December 2024

NATIONAL FOREWORD

(Adoption clause to be added later)

The Indian Standard supersedes IS/ISO 12643-5 : 2010 ‘Graphic Technology — Safety Requirements for Graphic Technology Equipment and Systems Part 5 Stand-Alone Platen Presses’.

The main changes are as follows:

- a) In clause **3**, definitions for different operation modes (single stroke mode, dwell mode, continuous operation mode) have been added;
- b) In **4.2**, figures showing examples for safeguarding side access have been included;

- c) 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;
- d) In **4.4**, requirements for the positioning of laser scanners have been included;
- e) 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;
- f) In **4.6**, the requirements for timer controlled operation have been revised;
- g) In **4.7**, the requirements for stopping distance and performance have been revised;
- h) In clause **6**, requirements for the content of the instruction handbook have been added; and
- j) The list of significant hazards has been moved to an informative **Annex A**.

This standard is published in various parts. Other parts in this series are:

- 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

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standard. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear, referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standard for which Indian Standard also exist. The corresponding Indian Standard, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 4413 : 2010, Hydraulic fluid power — General rules and safety requirements for systems and their components	IS 10481 : 2020/ ISO 4413 : 2010 Hydraulic Fluid Power — General Rules and Safety Requirements for Systems and their Components (<i>second revision</i>)	<i>Identical</i>
ISO 4414 : 2010, Pneumatic fluid power — General rules and safety	IS 12725 : 2021/ ISO 4414 : 2010 Pneumatic Fluid Power - General Rules and Safety Requirements for	<i>Identical</i>

requirements for systems and their components	Systems and their Components (<i>second revision</i>)	
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	IS 16835 (Part 2) : 2018/ 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	<i>Identical</i>
ISO 12100 : 2010, Safety of machinery — General principles for design — Risk assessment and risk reduction	IS 16819 : 2018/ ISO 12100 : 2010 Safety of machinery - General principles for design - Risk assessment and risk reduction	<i>Identical</i>
ISO 13850 : 2015, Safety of machinery — Emergency stop function — Principles for design	IS 16818 : 2018/ ISO 13850 : 2015 Safety of machinery - Emergency stop function - Principles for design	<i>Identical</i>
ISO 13855 : 2010, Safety of machinery — Positioning of safeguards with respect to the approach speeds of parts of the human body	IS 16815 : 2019/ ISO 13855 : 2010 Safety of machinery - Positioning of safeguards with respect to the approach speeds of parts of the human body	<i>Identical</i>
ISO 13857 : 2019, Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs	IS 16814 : 2021/ ISO 13857 : 2019 Safety of Machinery — Safety Distances to Prevent Hazard Zones Being Reached by Upper and Lower Limbs (<i>first revision</i>)	<i>Identical</i>
ISO 14120 : 2015, Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards	IS 16811 : 2018/ ISO 14120 : 2015 Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards	<i>Identical</i>
IEC 61496-1 : 2020, Safety of machinery — Electro- sensitive protective equipment — Part 1: General requirements and tests	IS 16502 (Part 1) : 2023/ IEC 61496- 1 : 2020, Safety of Machinery – Electro Sensitive Protective Equipment Part 1 General Requirements and Tests	<i>Identical</i>
IEC 61496-3 : 2018, Safety of machinery — Electro- sensitive protective equipment — Part 3 : Particular requirements for active opto- electronic protective devices responsive to diffuse reflection (AOPDDR)	IS 16502 (Part 3) : 2020/ IEC 61496- 3 : 2018 Safety of Machinery — Electro-sensitive Protective Equipment Part 3 Particular Requirements for Active Opto- electronic Protective Devices Responsive to Diffuse Reflection (AOPDDR)	<i>Identical</i>

IEC 62061 : 2021, Safety of machinery — Functional safety of safety- related electrical, electronic and programmable electronic control systems	IS 16501 : 2023/ IEC 62061 : 2021, Safety of Machinery - Functional Safety of Safety-Related Control Systems (<i>first revision</i>)	<i>Identical</i>
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The technical committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard:

<i>International Standard</i>	<i>Title</i>
IEC/TS 61496-4-3 : 2015	Safety of machinery — Electro-sensitive protective equipment — Part 4-3: Particular requirements for equipment using vision based protective devices (VBPD) — Additional requirements when using stereo vision techniques (VBPDEST)
ISO 13849-1 : 2023	Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design
ISO 12643-1 : 2023	Graphic technology — Safety requirements for graphic technology equipment and systems — Part 1: General requirements

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded-off value should be the same as that of the specified value in this standard.

NOTE — The technical content of the document has not been enclosed as these are identical with the corresponding ISO standard. For details, please refer the corresponding **ISO 12643-5 : 2023** or kindly contact:

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