

**BUREAU OF INDIAN STANDARDS****DRAFT FOR COMMENTS ONLY**

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भारतीय मानक मसौदा

**मशीनरी की सुरक्षा – फंसे हुए कुंजी इंटरलॉकिंग उपकरण –  
डिजाइन और चयन के लिए सिद्धांत**

(ISO/TS 19837 का अधिग्रहण)

**DRAFT** Indian Standard

**SAFETY OF MACHINERY — TRAPPED KEY INTERLOCKING  
DEVICES — PRINCIPLES FOR DESIGN AND SELECTION**

(Adoption of ISO/TS 19837)

ICS 13.110

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Safety of Machinery Sectional  
Committee, MED 40

Last date or receipt of comments is  
**05 May 2024**

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**NATIONAL FOREWORD**

*(Adoption clauses to be added later)*

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

- a) Wherever the words 'International Standard' appears 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 Standards for which Indian Standards also exist. The corresponding Indian Standards, 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 14119:2013, Safety of machinery — Interlocking devices associated with guards — Principles for design and selection	IS 16812 : 2018/ ISO 14119 : 2013, Safety of machinery — Interlocking devices associated with guards — Principles for design and selection	Identical
ISO 13849-1, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design	IS 16810 (Part 1) : 2018/ ISO 13849-1 : 2015, Safety of machinery — Safety related parts of control systems: Part 1 General principles for design	Identical
ISO 13849-2 : 2012, Safety of machinery — Safety-related parts of control systems — Part 2: Validation	IS 16810 (Part 2) : 2018/ ISO 13849-2 : 2012, Safety of machinery — Safety related parts of control systems: Part 2 Validation	Identical

The technical committee has reviewed the provision 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 60947-1:2008	Low-voltage switchgear and controlgear — Part 1: General rules

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.

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**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/TS 19837 : 2018** or kindly contact:

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