AS 4024.2802:2017
IEC TS 62046:2008

AS 4024.2802:2017

Australian STANDARD

Safety of machinery

Part 2802: Application of protective equipment to detect the presence of persons

STANDARDS Australia

This Australian Standard® was prepared by Committee SF-041, Safety of Machinery. It was approved on behalf of the Council of Standards Australia on 4 July 2017.
This Standard was published on 28 July 2017.

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- Australian Manufacturing Workers Union
- Australian Packaging and Processing Machinery Association
- Department of Industry, Skills and Regional Development, NSW
- Engineers Australia
- Human Factors and Ergonomics Society of Australia
- Institute of Instrumentation, Control and Automation, Australia
- National Safety Council of Australia
- Safety Institute of Australia
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- University of Melbourne
- Workplace Health and Safety Queensland
- WorkSafe Victoria

This Standard was issued in draft form for comment as DR AS 4024.2802:2017.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard®

Safety of machinery

Part 2802: Application of protective equipment to detect the presence of persons

First published as AS 4024.2802:2017.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76035 858 7

PREFACE

This Standard was prepared by the Standards Australia Committee SF-041. Safety of Machinery.

The objective of this Standard is to specify the requirements for the selection, positioning, configuration and commissioning of protective equipment to detect the presence of persons in order to protect those persons from dangerous part(s) of machinery in industrial applications.

This Standard is identical with, and has been reproduced from IEC TS 62046:2008, *Safety of machinery—Application of protective equipment to detect the presence of persons.*

As this Standard is reproduced from an International Technical Specification, the following applies:

(a) In the source text 'this Technical Specification' should read 'this Australian Standard'.

(b) A full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

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FOREWORD

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- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- The subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 62046, which is a technical specification, has been prepared by IEC technical committee 44: Safety of machinery – Electrotechnical aspects.

This second edition cancels and replaces the first edition issued in 2004. This second edition constitutes a general technical revision of the first edition, and includes further examples of interfacing and muting techniques.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
44/534/DTS	44/552B/RVC

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This Technical Specification provides information on the application of protective equipment, which employs a sensing device(s) to detect person(s) in or approaching an area, in order to reduce or minimize a risk from hazardous parts of machinery, without providing a physical barrier.

The objective of this specification is to assist: standards writing committees responsible for developing machine standards ("C" Standards), machine designers, manufacturers and refurbishers, machine safety certification organizations, workplace authorities and others on the proper application of protective equipment to machinery.

Figures 1 and 2 show the general context and the intended use of this specification.

Clauses 1 to 5, 7 and 8 of this specification apply to all protective equipment included in the scope, Clause 6 contains guidance for the application of specific kinds of protective equipment.

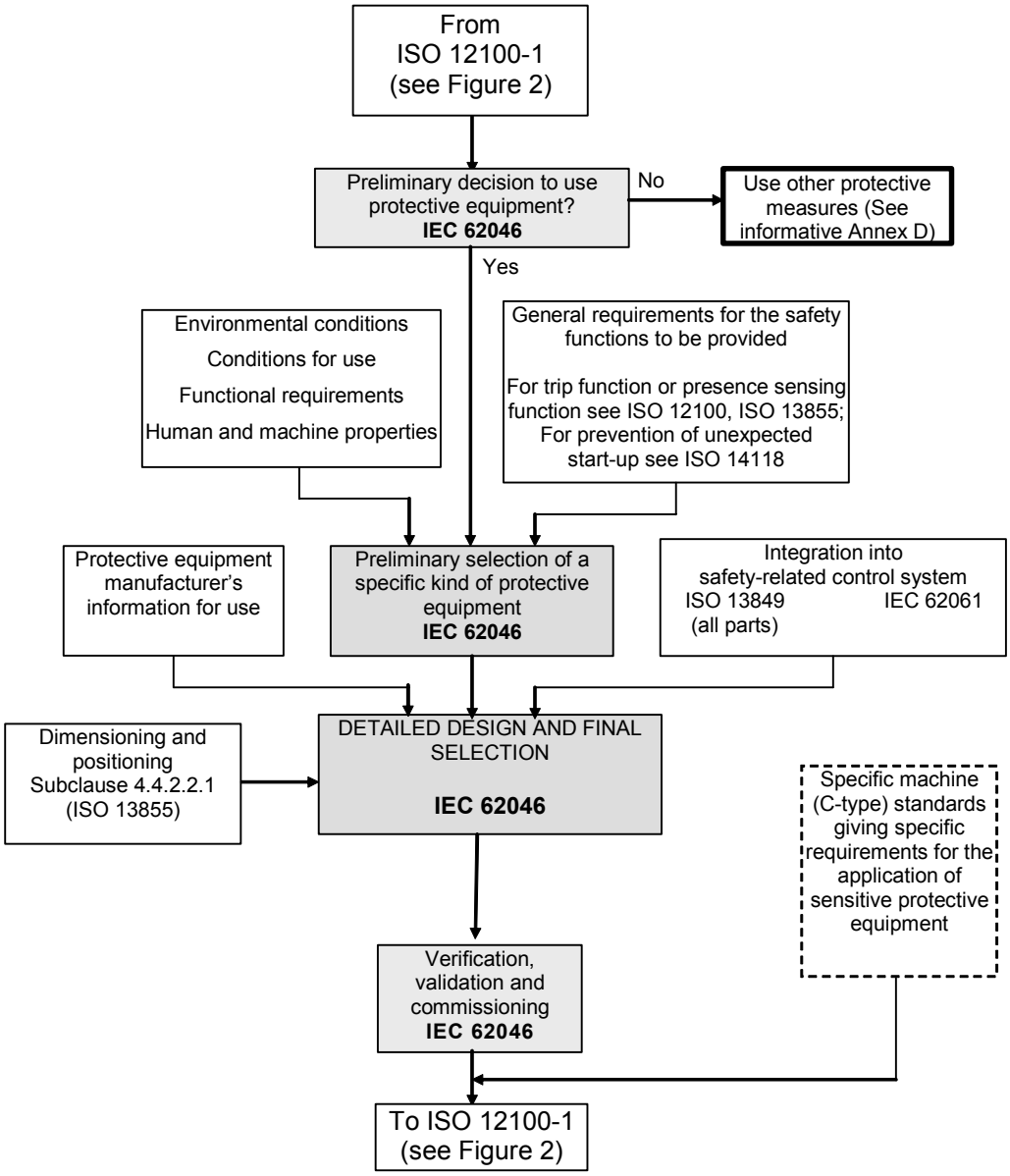

Figure 1 – Relationship of this Technical Specification to other standards

(see also Figure 2)

AUSTRALIAN STANDARD

Safety of machinery

Part 2802:
Application of protective equipment to detect the presence of persons

1 Scope

This Technical Specification specifies requirements for the selection, positioning, configuration and commissioning of protective equipment to detect the presence of persons in order to protect those persons from dangerous part(s) of machinery in industrial applications. This standard covers the application of electro-sensitive protective equipment (ESPE) specified in IEC 61496 (all parts) and pressure sensitive mats and floors specified in ISO 13856-1.

It takes into account the characteristics of the machinery, the protective equipment, the environment and human interaction by persons of 14 years and older.

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.

IEC 60204-1, *Safety of machinery – Electrical equipment of machines – Part 1: General requirements*

IEC 61496-1:2004, *Safety of Machinery – Electro-sensitive protective equipment – General requirements and tests*

IEC 61496-2:1997, *Safety of machinery – Electro-sensitive protective equipment – Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs)*

IEC 61496-3:2001, *Safety of machinery – Electro-sensitive protective equipment – Particular requirements for equipment for Active Opto-Electronic Protective Devices responsive to Diffuse Reflection (AOPDDR)*

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

ISO 12100-1: 2003, *Safety of machinery – Basic concepts, general principles for design – Part 1: Basic terminology, methodology*

ISO 12100-2: 2003, *Safety of machinery – Basic concepts, general principles for design – Part 2: Technical principles*

ISO 13849 (all parts), *Safety of Machinery – Safety-related parts of control systems*

ISO 13855:2002, *Safety of machinery – Positioning of protective equipment with respect to the approach speeds of parts of the human body*

ISO 13856-1:2001, *Safety of machinery – Pressure-sensitive protective devices – Part 1: General principles for design and testing of pressure-sensitive mats and pressure-sensitive floors*

ISO 14121 (all parts), *Safety of machinery – Risk assessment*

