

Australian Standard™

Safety of machinery

Part 1803: Safety distances and safety gaps—Minimum gaps to prevent crushing of parts of the human body



This Australian Standard was prepared by Committee SF-041, General Principles for the Guarding of Machinery. It was approved on behalf of the Council of Standards Australia on 18 April 2006.
This Standard was published on 29 June 2006.

The following are represented on Committee SF-041:

Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Department for Administration and Information Services, SA
Department of Consumer and Employment Protection, WorkSafe Division, WA
Department of Primary Industries, Mine Safety, NSW
Engineers Australia
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Originated as part of AS 4024.1(Int)—1992.
Previous edition part of AS 4024.1—1996.
Revised in part and redesignated as AS 4024.1803—2006.

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Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7416 4

PREFACE

This Standard was prepared by the Standards Australia Committee SF-041, to supersede, in part, AS 4024.1—1996, *Safeguarding of Machinery, Part 1: General principles*.

During its work, the Committee considered a number of Standards originating within the European Community in the field of safety machinery. Many of these European Standards are being adopted virtually unchanged as International Standards by the International Organization for Standardization (ISO) and the Committee has agreed to continue to use material emanating from both CEN and ISO in this new edition. This action will maintain consistency with previous editions of AS 4024.1 and other machine-specific Australian Standards.

This edition has been published as a series rather than the single Standard previously published as AS 4024.1. In doing this, the Committee has cleared the way for simple revisions in the future. When a new edition of a relevant Standard becomes available at the international level, it will be adopted and published within the framework of AS 4024 with a minimum delay, so ensuring continued international alignment.

The term ‘informative’ has been used in this Standard to define the application of the Appendix to which it applies. An ‘informative’ Appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard Safety of machinery

Part 1803: Safety distances and safety gaps—Minimum gaps to prevent crushing of parts of the human body

1 SCOPE

This Standard establishes values for the minimum gaps to enable machinery designers to avoid hazards from crushing zones. It specifies minimum gaps relative to parts of the human body and is applicable when adequate safety can be achieved by this method.

This Standard is applicable to risks from crushing hazards only and is not applicable to other possible hazards (e.g. impact, shearing, drawing-in).

NOTE: For impact, shearing or drawing-in hazards, for example, additional or other measures need to be taken.

2 OBJECTIVE

The objective of this Standard is to enable designers, manufacturers, suppliers, employers and users of machinery to minimize risks to the health and safety of those who must work with or otherwise near machinery by providing gap dimensions to prevent crushing of parts of the human body by machinery.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS

4024 Safety of machinery

4024.1201 Part 1201: General principles—Basic terminology and methodology

4024.1202 Part 1202: General principles—Technical principles

4024.1301 Part 1301: Risk assessment—Principles for risk assessment

4024.1801 Part 1801: Safety distances and safety gaps—Safety distances to prevent danger zones being reached by the upper limbs

4 DEFINITIONS

For the purposes of this Standard, the definitions given in AS 4024.1201, AS 4024.1801 and the following definition apply.

4.1 Crushing zone

Zone in which the human body or parts of the human body are exposed to a crushing hazard. The hazard will be generated if either two movable parts are moving towards one another, or one movable part is moving towards a fixed part.

NOTE: See also Appendix A.

5 MINIMUM GAPS

5.1 Methodology

The method of using this Standard shall form part of the iterative safety strategy outlined in AS 4024.1201.