

Australian Standard™

Safety of machinery

Part 1201: General principles—Basic terminology and methodology



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 3 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
Federal Chamber of Automotive Industries
Human Factors and Ergonomics Society of Australia
Institution of Instrumentation, Control and Automation Australia
National Electrical and Communications Association
National Safety Council of Australia
Office of the Australian Safety and Compensation Council
Safety Institute of Australia
The University of Melbourne
Tractor and Machinery Association of Australia
Victorian WorkCover Authority

Keep your Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard™

Safety of machinery

Part 1201: General principles—Basic terminology and methodology

Originally as part of AS 4024.1(Int)—1992.
Previous edition part of AS 4024.1—1996.
Revised in part and redesignated as AS 4024.1201—2006.

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

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

ISBN 0 7337 7433 4

PREFACE

This Standard was prepared by the Standards Australia Committee SF-041, General Principles for the Guarding of Machinery as a revision, in part, of AS 4024.1, *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 of 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 of Parts 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.

CONTENTS

	Page
1 SCOPE.....	4
2 OBJECTIVE	4
3 REFERENCED DOCUMENTS.....	4
4 DEFINITIONS.....	4
5 HAZARDS TO BE TAKEN INTO ACCOUNT WHEN DESIGNING MACHINERY	10
6 STRATEGY FOR RISK REDUCTION.....	11
APPENDIX A SCHEMATIC REPRESENTATION OF A MACHINE	19

STANDARDS AUSTRALIA

Australian Standard
Safety of machinery**Part 1201: General principles—Basic terminology and methodology****1 SCOPE**

This Standard defines the basic terminology and methodology used in achieving safety of machinery.

The provisions stated in this Standard are intended for the designer.

This Standard does not deal with injury or damage to domestic animals, property or the environment.

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 employees and others working with or otherwise near machinery by providing terminology and methodology for their use.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

4024 Safety of machinery

4024.1202 Part 1202: General principles—Technical principles

4024.1301 Part 1301: Risk assessment—Principles for risk assessment

4024.1602 Part 1602: Design of controls, interlocks and guarding—Interlocking devices associated with guards—Principles for design and selection

4024.1604 Part 1604: Design of controls, interlocks and guarding—Emergency stop—Principles for design

60204 Safety of machinery—Electrical equipment of machines

60204.1 Part 1: General requirements (IEC 60204-1, Ed.5 (FDIS) MOD)

4 DEFINITIONS

For the purposes of this Standard, the following definitions apply.

4.1 Common cause failures

Failures of different items, resulting from a single event, where these failures are not consequences of each other.

NOTE: Common cause failures should not be confused with common mode failures.

4.2 Common mode failures

Failures of items characterized by the same fault mode.

NOTE: Common mode failures should not be confused with common cause failures, as the common mode failures may result from different causes.