AS 4024.1502—2006

Australian Standard™

Safety of machinery

Part 1502: Design of safety related parts of control systems—Validation

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 11 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

This Standard was issued in draft form for comment as DR 05454.

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Originally as part of AS 4024.1(Int)—1992.
Previous edition part of AS 4024.1—1996.
Revised in part and redesignated as AS 4024.1502—2006.

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

ISBN 0 7337 7484 9

PREFACE

This Standard was prepared by the Standards Australia Committee SF-041, as a revision, in part, of 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 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.

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1 SCOPE

This Standard specifies the procedures and conditions to be followed for the validation by both analysis and testing of the safety functions provided, and the category achieved for the safety related parts of the control system in compliance with AS 4024.1501, using the design rationale provided by the designer.

This Standard does not give complete validation requirements for programmable electronic systems and therefore can require the use of other standards.

NOTE: Requirements for programmable electronic systems, including embedded software, are given in the AS 61508 series.

2 OBJECTIVE

The objective of this Standard is to provide designers, manufacturers, suppliers, installers and users of safety related parts of control systems with the means of minimizing risks to the health and safety of those working with or otherwise near machinery fitted with safety related parts within their control systems.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS
1447 Hot-rolled spring steel
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 of risk assessment
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60269.1 Part 1: General requirements
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