AS 4024.3301—2009

Australian Standard®

Safety of machinery

Part 3301: Robots for industrial environments—Safety requirements

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 26 March 2009.
This Standard was published on 18 May 2009.

The following are represented on Committee SF-041:

- Australian Chamber of Commerce and Industry
- Department of the Premier and Cabinet, SA
- Department of Employment and Industrial Relations, Qld
- Department of Primary Industries, Mineral Resources, 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
- Safety Institute of Australia
- Tractor and Machinery Association of Australia
- University of Melbourne
- Winery Engineering Association
- WorkCover NSW
- WorkSafe Victoria

This Standard was issued in draft form for comment as DR 06103.

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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Originated as AS 2039—1987.
Revised and redesignated as AS 4024.3301—2009.

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

ISBN 0 7337 9152 2

PREFACE

This Standard was prepared by the Standards Australia Committee SF-041, General Principles for the Guarding of Machinery to supersede AS 2939—1987, *Industrial robot systems—Safe design and usage.*

During its work, the Committee agreed to use the International Standard ISO 10218-1, *Robots for industrial environments—Safety requirements,* Part 1: *Robot* as the basis for this Australian Standard. This action will ensure the continuing consistency of machinery safety standards with each other as well as maintaining a consistent approach to machinery safety standards in Australia.

Hazards associated with robots are well recognized but the sources of these hazards are frequently unique to a particular robot system. The number and types of hazards are directly related to the nature of the automation process and the complexity of the installation. Risks associated with these hazards vary with the type of robot used, its purpose and the way in which it is installed, programmed, operated and maintained.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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