



Safety of machinery

Part 1100: Application guide



AS 4024.1100:2019

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- Australian Manufacturing Technology Institute
- Australian Manufacturing Workers Union
- Australian Packaging and Processing Machinery Association
- Engineers Australia
- Human Factors & Ergonomics Society of Australia
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- Safety Institute of Australia
- SafeWork NSW
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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee SF-041, Safety of Machinery, to supersede AS/NZS 4024.1100:2014.

The objective of this Standard is to provide background information and an application guide for the AS(/NZS) 4024.1 series.

The objective of this revision is to update the relevant parts to latest editions of the source ISO/EN/IEC standards and to include a new part 1204, which is the direct text adoption of IEC 60204-1:2016, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements*. This will replace AS 60204.1—2005, which was itself a direct text adoption of an earlier edition of IEC 60204-1.

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1 Scope

The AS(/NZS) 4024.1XXX, *Safety of machinery*, series provides users with the essential framework for designing and operating safe machine systems. It applies to single items of machinery or groupings of machines, so that a safe interface between discrete items is also ensured.

In the Australian and Australian/New Zealand context, the Standards apply to all workplace machinery and equipment described as “plant” in legislation. They do not apply to hand-powered plant or hand-supported powered plant, although the principles contained within the Standards can provide guidance for many applications in the broader workplace.

2 Objective of AS(/NZS) 4024.1XXX series

The objective of the AS(/NZS) 4024.1XXX (series) is to enable those who design, manufacture, supply, control, use and maintain machinery to minimize the risks to the health and safety of people working with or near machinery, by providing technical principles for the design, manufacture, maintenance and use of machine systems.

3 Documents referenced in the series

Direct text adoption means that the referenced Standards in the constituent parts all bear international Standard numbers. Some, but not all, are embedded within the AS(/NZS) 4024.1XXX series.

Where this is the case, a list is provided in the Preface of each part showing international referenced documents and the equivalent AS(/NZS) Standards. This will help users to quickly navigate to the required part.

A cross-reference table showing the AS(/NZS) part numbers of this series and the relevant international (ISO, IEC and EN) Standards is also provided in [Appendix B](#).

It is expected from experience that there will be minimal need for recourse to the cross-reference list, as users will quickly become familiar with the relevant parts.

4 Structure and rationale

The suite of the AS(/NZS) 4024 series is based on the structure of European Standards. This consists of three levels of Standards, which users will find set out in a number of the Standards embedded in the series. Although the A, B and C level Standards have no relevance in Australia and New Zealand, this structure and interrelationship provided a template for the development of the Australian and Joint AS/NZS Standards. A schematic representation of the European structure and an Australian/New Zealand comparison is provided in [Appendix A](#).

The AS(/NZS) 4024.1XXX series is the foundational, mandatory suite of standards for the design of a machine or machine-based system. The AS 4024.2XXX (Part 2) series provides individual technical supporting Standards. Whereas the Standards in the AS(/NZS) 4024.1XXX (Part 1) series are considered mandatory as a whole, the Standards comprising AS 4024.2XXX (Part 2) series may be discretionary (that is they may be mandatory only for those designers or users of machines or systems utilizing the range of strategies represented by the Part 2 series). For example, if a designer chooses to utilize a two-hand control device, then the Part 2 Standard dealing with two-hand control devices is considered mandatory and it is incumbent upon the designer of such a safeguarding strategy to conform to the relevant Part 2 Standard. It is a similar situation for the use of presence-sensing systems.