

Australian Standard™

Safety of machinery

**Part 1903: Displays, controls, actuators
and signals—Ergonomic requirements
for the design of displays and control
actuators—Control actuators**



This Australian Standard was prepared by Committee SF-041, General Principles for the Safety of Machinery. It was approved on behalf of the Council of Standards Australia on 1 May 2006.
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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
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PREFACE

This Standard was prepared by the Standards Australia Committee SF-041, General Principles for the Guarding of Machinery, as 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 dealing with the safety of machinery originating within the European Community. Many of these European Standards are now 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, to maintain consistency with previous editions of AS 4024, and other, machine-specific Australian Standards currently under development.

This edition has been published as a series of small parts rather than the single part of AS 4024.1 previously available. In doing this, the Committee has cleared the way for simple revisions in the future. When a new edition of a relevant EN or ISO Standard becomes available, it can 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 1903: Displays, controls, actuators and signals—Ergonomic requirements for the design of displays and control actuators—Control actuators****1 SCOPE**

This Standard specifies requirements and guidance on the selection, design and location of control actuators so that they are adapted to the requirements of the operators, are suitable for the control task in question and take account of the circumstances of their use.

This Standard applies to manual control actuators used in equipment for occupational and private use. It is particularly important to observe the recommendations in this Standard where operating a control actuator may lead to injury or damage to health, either directly or as a result of a human error.

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 ergonomic requirements for the design of control actuators.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS

4024 Safety of machinery

4024.1301 Part 1301: Risk assessment—Principles for risk assessment

4024.1401 Part 1401: Ergonomic principles—Design principles—Terminology and design principles

4024.1901 Part 1901: Displays, controls, actuators and signals—Ergonomic requirements for the design of displays and control actuators—General principles for human interactions with displays and control actuators

4024.1902 Part 1902: Displays, controls, actuators and signals—Ergonomic requirements for the design of displays and control actuators—Displays

ISO

447 Machine tools—Direction of operation of controls

IEC

60447 Basic and safety principles for man-machine interface, marking and identification—Actuating principles

4 DEFINITIONS

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