AS/NZS 4024.1302:2019
ISO 14123-1:2015

AS/NZS 4024.1302:2019

Australian/New Zealand Standard™

Safety of machinery

Part 1302: Risk assessment — Reduction of risks to health from hazardous substances emitted by machinery — Principles and specifications for machinery manufacturers

AS/NZS 4024.1302:2019

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The following are represented on Committee SF-041:

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Human Factors and Ergonomics Society of Australia
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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-041, Safety of Machinery, to supersede AS/NZS 4024.1302:2014, *Safety of machinery, Part 1302: Risk assessment — Reduction of risks to health from hazardous substances emitted by machinery — Principles and specifications for machinery manufacturers*.

The objective of this Standard is to establish principles for the control of risks to health resulting from hazardous substances emitted by machinery.

This Standard is not applicable to substances that are a hazard to health solely because of their explosive, flammable or radioactive properties or their behaviour at extremes of temperature or pressure.

This Standard is identical with, and has been reproduced from, ISO 14123-1:2015, *Safety of machinery — Reduction of risks to health resulting from hazardous substances emitted by machinery — Part 1: Principles and specifications for machinery manufacturers*.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text "this part of ISO 14123" should read "this Australian/New Zealand Standard".

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 199, *Safety of machinery*.

This second edition cancels and replaces the first edition (ISO 14123-1:1998), of which, by taking ISO 12100 into account, it constitutes a minor revision.

ISO 14123 consists of the following parts, under the general title *Safety of machinery — Reduction of risks to health resulting from hazardous substances emitted by machinery*:

— *Part 1: Principles and specifications for machinery manufacturers*

— *Part 2: Methodology leading to verification procedures*

Introduction

The structure of safety standards in the field of machinery is as follows:

a) **type-A standards** (basic safety standards) giving basic concepts, principles for design, and general aspects that can be applied to machinery;

b) **type-B standards** (generic safety standards) dealing with one safety aspect or one type of safeguard that can be used across a wide range of machinery:

   — type-B1 standards on particular safety aspects (for example, safety distances, surface temperature, noise);

   — type-B2 standards on safeguards (for example, two-hand controls, interlocking devices, pressure-sensitive devices, guards);

c) **type-C standards** (machine safety standards) dealing with detailed safety requirements for a particular machine or group of machines.

This document is a type-B1 standard as stated in ISO 12100. Its primary purpose is to give guidance to the writers of type-C standards when machines are identified as emitting hazardous substances as a significant risk. This part of ISO 14123 can also be used as guidance in controlling the risk where there is no type-C standard for a particular machine.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

— machine manufacturers (small, medium and large enterprises);

— health and safety bodies (regulators, accident prevention organizations, market surveillance etc.);

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

— machine users/employers (small, medium and large enterprises);

— machine users/employees (e.g. trade unions, organizations for people with special needs);

— service providers, e.g. for maintenance (small, medium and large enterprises);

— consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The requirements of this document can be supplemented or modified by a type-C standard.

For machines that are covered by the scope of a type-C standard and that have been designed and built according to the requirements of that standard, the requirements of that type-C standard take precedence.

Australian/New Zealand Standard

Safety of machinery

Part 1302: Risk assessment — Reduction of risks to health from hazardous substances emitted by machinery—Principles and specifications for machinery manufacturers

1 Scope

This part of ISO 14123 establishes principles for the control of risks to health resulting from hazardous substances emitted by machinery.

This part of ISO 14123 is not applicable to substances that are a hazard to health solely because of their explosive, flammable or radioactive properties or their behaviour at extremes of temperature or pressure.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100 and the following apply.

3.1
intended use
use of a machine in accordance with the information for use provided in the instructions

[SOURCE: ISO 12100:2010, 3.23]

3.2
hazardous substance
any chemical or biological agent that is hazardous to health

EXAMPLE Substances or preparations classified as very toxic, toxic, harmful, corrosive, irritant, sensitizing, carcinogenic, mutagenic, teratogenic, pathogenic or asphyxiant. For EU countries, see also Regulation (EC) No 1272/2008[3].

Note 1 to entry: For the definitions of “chemical agent” and “biological agent”, see EN 1540.

4 Risk assessment

4.1 An identification of hazards and assessment of the foreseeable risks resulting from substances hazardous to health shall be made by the machinery manufacturer. This process shall cover, as far as possible, any potential hazard that can arise from exposure of persons to the machine at any phase of its life cycle.

NOTE Details of the methodology of risk assessment are given in ISO 12100.