AS/NZS 4024.1701:2014
ISO 7250-1:2008

AS/NZS 4024.1701:2014

Australian/New Zealand Standard™

Safety of machinery

Part 1701: Human body measurements—Basic human body measurements for technological design

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF-041, General Principles for the Guarding of Machinery. It was approved on behalf of the Council of Standards Australia on 5 June 2014 and on behalf of the Council of Standards New Zealand on 24 April 2014.
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The following are represented on Committee SF-041:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Manufacturing Workers Union
Department of Mines and Petroleum, WA
Department of the Premier and Cabinet, SA
Engineers Australia
Federal Chamber of Automotive Industries
Human Factors and Ergonomics Society of Australia
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 4024.1701.

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Part 1701: Human body measurements—Basic human body measurements for technological design

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-041, General Principles for the Guarding of Machinery, to supersede AS 4024.1701—2006.

It is emphasized that this Standard is part of the AS(/NZS) 4024.1 series and it is imperative that it is used in conjunction with other applicable parts of the series. A complete listing of all current parts of the AS(/NZS) 4024.1 series can be found at the Standards Australia website <www.standards.org.au> and in AS/NZS 4024.1100, *Safety of machinery*, Part 1100: *Application Guide*.

The objective of this Standard is to provide a description of anthropometric measurements which can be used as a basis for comparison of population groups. It is intended to serve as a guide for ergonomists who are required to define population groups and apply their knowledge to the geometric design of the places where people work and live. It gives information to the ergonomist and designer on the anatomical and anthropometrical bases and principles of measurement which are applied in the solution of design tasks.

This Standard is identical with, and has been reproduced from ISO 7250-1:2008, *Basic human body measurements for technological design*, Part 1: *Body measurement definitions and landmarks.*

As this Standard is reproduced from an International Standard, the following applies:

(a) In the source text ‘this part of ISO 7250’ should read ‘this Australia/New Zealand Standard’.

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

CONTENTS

Page

INTRODUCTION

The well-being of people is greatly dependent on their geometrical relationship with various factors such as clothing, places of work, transportation, homes and recreational activities. To ensure harmony between people and their environments, it is necessary to quantify the size and shape of people for optimization of the technological design of the workplace and the home environment.

NOTES

AUSTRALIAN/NEW ZEALAND STANDARD

Safety of machinery

Part 1701:
Human body measurements—Basic human body measurements for technological design

1 Scope

This part of ISO 7250 provides a description of anthropometric measurements which can be used as a basis for comparison of population groups.

The basic list specified in this part of ISO 7250 is intended to serve as a guide for ergonomists who are required to define population groups and apply their knowledge to the geometric design of the places where people work and live.

This list is not intended to serve as a guide for how to take anthropometric measurements, but it gives information to the ergonomist and designer on the anatomical and anthropometrical bases and principles of measurement which are applied in the solution of design tasks.

This part of ISO 7250 is intended to be used in conjunction with national or international regulations or agreements to assure harmony in defining population groups. In its various applications, it is anticipated that the basic list will be supplemented by specific additional measurements.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
population group
group of people having some common environment or activity

NOTE These groups may be as diverse as geographically defined populations or specified age groups.

2.2 Anthropometric terms[1)]

2.2.1
acromion
most lateral point of the lateral edge of the spine of the scapula

NOTE The height of the acromion is usually equated with shoulder height.

2.2.2
anterior
ventral
towards the front of the body

1) A detailed glossary of terms is found in the publications listed in the Bibliography.