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Australia



Earth-moving machinery — Service tools

Part 2: Mechanical pullers and pushers



AS ISO 4510.2:2021

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- Department of Natural Resources, Mines and Energy, Qld
- Department of Regional NSW
- Engineers Australia/Mining Electrical and Mining Mechanical Engineering Society
- Institute of Instrumentation, Control & Automation Australia
- Minerals Council of Australia
- University of Queensland

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Preface

This Standard was prepared by the Standards Australia Committee ME-063, Earthmoving Equipment.

The objective of this document is to specify guidance for the types, general requirements and main nominal dimensions of mechanical pullers (used for pulling gears and bearings), attachments and adaptors used for carrying out repair work.

This document includes mechanical pullers and push pullers, pulling attachments and adaptors which are commonly used for pulling gears and bearings mounted on the types of earth-moving machinery defined in ISO 6165.

This document is identical with, and has been reproduced from, ISO 4510-2:1996, *Earth-moving machinery — Service tools — Part 2: Mechanical pullers and pushers*.

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

- (a) In the source text “this part of ISO 4510” should read “this document”.
- (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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 4510-2 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 3, *Operation and maintenance*.

This second edition cancels and replaces the first edition (ISO 4510-2:1986), which has been technically revised.

ISO 4510 consists of the following parts, under the general title *Earth-moving machinery — Service tools*:

- *Part 1: Common maintenance and adjustment tools*
- *Part 2: Mechanical pullers and pushers*

[Annex A](#) of this part of ISO 4510 is for information only.

Australian Standard®

Earth-moving machinery — Service tools

Part 2: Mechanical pullers and pushers

1 Scope

This part of ISO 4510 specifies for guidance the types, general requirements and main nominal dimensions of mechanical pullers, attachments and adaptors used for carrying out repair work.

This part of ISO 4510 includes mechanical pullers and push pullers, pulling attachments and adaptors which are commonly used for pulling gears and bearings mounted on the types of earth-moving machinery defined in ISO 6165.

Machine manufacturers should consider

- the usage of these pullers and pushers for carrying out repair work (see for example notes in [figures A.1, A.4 and A.5](#));
- choosing dimensions for machine design from [tables 1 to 4](#), and
- specifying, in suitable manuals as described in ISO 6750, the type of tools to be used for carrying out repair work.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 4510. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 4510 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4510-1:1987, *Earth-moving machinery — Service tools — Part 1: Common maintenance and adjustment tools*.

ISO 6165:—¹⁾, *Earth-moving machinery — Basic types — Vocabulary*.

ISO 6750:1984, *Earth-moving machinery — Operation and maintenance — Format and content of manuals*.

3 Types of pullers, attachments and adaptors

3.1 Mechanical pullers

[Figure 1](#) shows types of mechanical puller. These pullers can be used alone (see [figure A.1](#)) or in combination with external pulling attachments (see [figure A.2](#)) for disassembly operations.

1) To be published. (Revision of ISO 6165:1987)