

Australian Standard™

Earth-moving machinery—Hydraulic excavators—Laboratory tests and performance requirements for operator protective guards

This Australian Standard was prepared by Committee ME-063, Earthmoving Equipment. It was approved on behalf of the Council of Standards Australia on 15 April 2002 and published on 24 May 2002.

The following interests are represented on Committee ME-063:

Austrroads
Australian Industry Group
Construction and Mining Equipment Association of Australia
Department of Defence
Department of Mineral Resources, N.S.W.
Department of Natural Resources and Mines, Qld
Department of Primary Industries, Qld
Safety Institute of Australia
WorkCover New South Wales

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

Australian Standard™

Earth-moving machinery—Hydraulic excavators—Laboratory tests and performance requirements for operator protective guards

First published as AS 4988—2002.

COPYRIGHT

© Standards Australia International

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 4499 0

PREFACE

This Standard was prepared by the Standards Australia Committee ME-063, Earthmoving Equipment. The objective of this Standard is to provide designers, manufacturers, suppliers, employers and users of hydraulic excavators with specifications covering technical means to minimize the risks to health and safety of employees and others working with or otherwise near hydraulic excavators.

This Standard is identical with and has been reproduced from ISO 10262:1998, *Earth-moving machinery—Hydraulic excavators—Laboratory tests and performance requirements for operator protective guards*.

Statements expressed in mandatory terms in notes to text and tables are deemed to be requirements of this Standard.

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

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this International Standard' should read 'this Australian Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to equivalent Australian Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
148	Steel—Charpy impact test (V-notch)	1544 1544.2	Method of impact tests on metals— Part 2: Charpy V-notch
898	Mechanical properties of fasteners	4291	Mechanical properties of fasteners made of carbon steel and alloy steel
898-1	Part 1: Bolts, screws and studs	4291.1	Part 1: Bolts, screws and studs
898-2	Part 2: Nuts with specified proof load values—Coarse thread	4291.2	Part 2: Nuts with specified proof load values—Coarse thread
3164	Earth-moving machinery—Laboratory evaluation of protective structures— specifications for deflection-limiting volume	2294 2294.4	Earth-moving machinery—Protective structures Part 4: Specifications for deflection- limiting volume
5153	Earth-moving machinery, and tractors and machinery for agriculture and forestry— Seat index point	—	
7135	Earth-moving machinery—Hydraulic excavators—Terminology and commercial specifications	—	

AUSTRALIAN STANDARD

Earth-moving machinery — Hydraulic excavators — Laboratory tests and performance requirements for operator protective guards

1 Scope

This International Standard establishes a consistent, repeatable test procedure and performance requirements for evaluating operator-protective guarding that undergo loading. Such guards are usually intended to provide excavator operators with reasonable protection against objects (e.g. rocks and debris) which would otherwise penetrate the operators station from the front or top.

It is applicable to hydraulic excavators, as defined in ISO 7135 when equipped with an operator's station guard(s).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard 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 148:1983, *Steel — Charpy impact test (V-notch)*.

ISO 898-1:—¹⁾, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs*.

ISO 898-2:1992, *Mechanical properties of fasteners — Part 2: Nuts with specified proof load values — Coarse thread*.

ISO 3164:1995, *Earth-moving machinery — Laboratory evaluations of protective structures — Specifications for deflection-limiting volume*.

ISO 5353:1995, *Earth-moving machinery, and tractors and machinery for agriculture and forestry— Seat index point*.

ISO 7135:—²⁾, *Earth-moving machinery — Hydraulic excavators — Terminology and commercial specifications*.

3 Definitions

For the purposes of this International Standard, the following definitions and abbreviations apply.

3.1

operator guards

system of a **top guard** (3.3) and a **front guard** (3.2) for the operator station of excavators

1) To be published. (Revision of ISO 898-1:1988)

2) To be published. (Revision of ISO 7135:1993)