

AS 2957.5—1988/ISO 7130—1981

Australian Standard[®]

**EARTH-MOVING MACHINERY—
OPERATION AND MAINTENANCE**

**Part 5—GUIDE TO PROCEDURE
FOR OPERATOR
TRAINING**

(ISO Title: Earth-moving machinery—Guide to procedure for operator training)

This Australian Standard was prepared by Committee ME/63, Earthmoving Equipment. It was approved on behalf of the Council of the Standards Association of Australia on 3 March 1988 and published on 17 June 1988.

The following interests are represented on Committee ME/63:

Australian Mining Industry Council
Bureau of Steel Manufacturers of Australia
Construction Equipment Importers and Manufacturers of Australia
Department of Administrative Services
Department of Conservation, Forests and Lands, Vic.
Department of Defence
Department of Forestry, Qld.
Department of Industrial Relations and Employment, N.S.W.
Department of Labour, Vic.
Department of Mines, Qld.
Earth-movers and Road Contractors Association of Australia
Forestry Commission of New South Wales
Local Government Engineers Association of New South Wales
Metal Trades Industry Association of Australia
National Association of Australian State Road Authorities
Rural Water Commission, Vic.
Safety Institute of Australia
Telecom Australia
Tractor and Machinery Association of Australia
Water Board, Sydney

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 85210.

AS 2957.5—1988/ISO 7130—1981

Australian Standard®

**EARTH-MOVING MACHINERY—
OPERATION AND MAINTENANCE**

**Part 5—GUIDE TO PROCEDURE
FOR OPERATOR
TRAINING**

(ISO Title: Earth-moving machinery—Guide to procedure for operator training)

First published as AS 2957.5/ISO 7130—1988.

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 5029 5

CONTENTS

	<i>Page</i>
0 INTRODUCTION	3
1 SCOPE AND FIELD OF APPLICATION	3
2 REFERENCES	3
3 STRUCTURE OF TRAINING PROGRAMMES	3
4 GENERAL BASIC TRAINING	4
5 OPERATOR'S TRAINING RECORD BOOK	5
6 ADVANCED TRAINING FOR SPECIALIZED GROUPS OF MACHINES	5
7 SPECIALIZED 'INFIELD' CONVERSION OR 'RETRAINING' COURSES AND REFRESHER COURSES	8
8 RECORD OF TRAINING COURSE COMPLETION	8
ANNEX OPERATOR'S TRAINING RECORD BOOK—CHRONOLOGICAL OPERATIONAL EXPERIENCE	9

 FOREWORD

1. This Australian Standard corresponds with ISO 7130—1981, *Earth-moving machinery—Guide to procedure for operator training*.
2. Introduction to and complete listing of the SAA series of earth-moving machinery Standards (AS 2951 to AS 2958) is available on request.
3. For the purpose of this Australian Standard the words 'International Standard' should be replaced by 'Australian Standard'.
4. ISO Standards referred to in this Standard correspond with the following Australian Standards:

ISO Standard	Australian Standard
ISO 4510-1	AS 2957.1
ISO 4510-2	AS 2957.2
ISO 6165	AS 2951.1
ISO 6405	AS 2956.4
ISO 6750	AS 2957.4

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

Earth-moving machinery—Operation and maintenance

Part 5—Guide to procedure for operator training

0 Introduction

In preparing this guide it has been assumed that the candidates for basic operator training will be without any significant operational experience with the types of machine specified, and that candidates for more advanced training will previously have received training to the standard included in the basic training syllabus.

Proper selection of potential operators is essential if training is not to be wasted on unsuitable candidates. Earth-moving machinery operation is arduous, skilful work, often carried out in poor site conditions and a high degree of aptitude and enthusiasm is required. Candidates must be medically fit, sufficiently robust physically, and well-coordinated with good reflexes.

1 Scope and field of application

This International Standard specifies the nature of operator training appropriate for earth-moving machinery. It does not specify any procedure for proficiency or assessment of competence of an operator's ability, since these factors are usually covered by local and national procedures and regulations. It does not specify who is responsible for the training. It applies to machines as defined in ISO 6165.

2 References

ISO 4510, *Earth-moving machinery — Service tools — Part 1: Common maintenance and adjustment tools*
Part 2: Common repair tools — Mechanical pullers and pushers.

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

ISO 6405, *Earth-moving machinery — Symbols — Operator controls and others.*

ISO 6750, *Earth-moving machinery — Operation and maintenance — Guide to the format and content of manuals.*

3 Structure of training programmes

3.1 General

The content of each individual training programme should be integrated within the scope of all the programmes to provide a sequence of operational development from elementary principles to competent operation of the most sophisticated machines. Whilst the actual content of a programme may be adjusted to

suit individual conditions, the sequence of development should be observed.

For practical machine operator training it is desirable that no more than two trainees per machine are under instruction at any one time, with a maximum of three machines under supervision by each instructor. Wherever practicable, and particularly during the first few hours of training, it is desirable that one instructor should be allocated to each machine. During the first four hours of practical machine operation, however, one instructor should not be expected to supervise more than four trainees using two machines.

3.2 Safety

Throughout the training it must continually be emphasized that one of the **MOST IMPORTANT** aspects of machine operation and servicing is **SAFETY** (see 6, 4.1 and 6.2.15).

3.3 Stages of training

3.3.1 General basic training

The objective is to impart to the trainee operator the essential knowledge and skills fundamental to correct machine operation. It should include: the principles of starting and stopping; the maintenance of basic mechanisms such as engine, transmission, etc.; basic dimensional data such as length, width, mass, ground bearing pressure, speed, etc.; an appreciation of the factors affecting machine productivity; the interpretation of diagrams and load charts; significance and use of operator instruction manuals; operation of basic machines, for example small dumpers, wheeled and crawler machines in basic applications (see 4.1 to 4.3).

3.3.2 Operator's training record book

This book may be issued to all operators on completion of the general basic training course. Details of further training courses and site operational experience should subsequently be entered (see clause 5).

3.3.3 Advanced training for specialized groups of machines

This training is only to be given after successful completion of general basic training. It covers the operation of specific machines within a group (see 6.1 to 6.3).