

Australian/New Zealand Standard™

Safety of machinery

**Part 3614: Conveyors—Mobile and
transportable conveyors**



AS/NZS 4024.3614:2015

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF-041, Safety of Machinery. It was approved on behalf of the Council of Standards Australia on 10 August 2015 and on behalf of the Council of Standards New Zealand on 2 July 2015.

This Standard was published on 21 August 2015.

The following are represented on Committee SF-041:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Manufacturing Workers Union
Department of Trade and Investment, Regional Infrastructure and Services, NSW
Engineers Australia
Human Factors and Ergonomics Society of Australia
Institute of Instrumentation, Control and Automation Australia
National Safety Council of Australia
New Zealand Electrical Institute
Safety Institute of Australia
Winery Engineering Association
WorkCover New South Wales
Worksafe New Zealand
WorkSafe Victoria

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 Standards may also be withdrawn.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 joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

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.

Australian/New Zealand Standard™

Safety of machinery

Part 3614: Conveyors—Mobile and transportable conveyors

Originated in Australia in part as AS C215—1971.
Previous edition part of AS 1755—2000.
Jointly revised in part and redesignated as AS/NZS 4024.3614:2015.

COPYRIGHT

© Standards Australia Limited/Standards New Zealand

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, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-041, Safety of Machinery, to supersede (in part) AS 1755—2000, *Conveyors—Safety requirements*.

The objective of this Standard is to provide guidance and clarity in applying the principles articulated in the AS 4024.1 series of Standards to mobile conveyors and to protect workers and other persons against harm to their health, safety and welfare through the elimination or minimisation of lifecycle risks associated with conveyor systems.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	4
1.2 APPLICATION	4
1.3 REFERENCED DOCUMENTS.....	4
1.4 DEFINITIONS.....	5
SECTION 2 DESIGN AND MANUFACTURE	
2.1 DESIGN RISK ASSESSMENT	6
2.2 UNINTENDED MOVEMENT	7
2.3 STABILITY.....	7
2.4 ATTACHMENT POINTS FOR TOWING	8
2.5 WINCHES AND ROPES.....	9
2.6 BOOM.....	9
2.7 POWER TRANSMISSION.....	9
2.8 ELECTRICAL CABLES	10
2.9 CONVEYOR CONTROL.....	10
2.10 EMERGENCY STOP	10
2.11 WARNINGS AND INFORMATION	11
2.12 GUARDING.....	12
SECTION 3 TRANSPORT, COMMISSIONING AND OPERATION	
3.1 OVERHEAD POWERLINES.....	13
3.2 COMISSIONING	15
3.3 OPERATION.....	15
SECTION 4 MAINTENANCE	
4.1 GENERAL.....	16
4.2 MAINTENANCE DOCUMENTATION	16

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Safety of machinery

Part 3614: Conveyors—Mobile and transportable conveyors

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out minimum lifecycle safety requirements for mobile and transportable conveyors, which are in addition to the general requirements of AS/NZS 4024.3610 and supplement the particular requirements of AS/NZS 4024.3611 or AS/NZS 4024.3612, as applicable.

The requirements of this Standard apply to mobile and transportable conveyors and are intended to be used by all persons conducting a business or undertaking in relation to such conveyors and include designers, manufacturers, suppliers, installers, users and owners of conveyors or conveyor systems.

This Standard covers lifecycle design. See AS 4234.1 for requirements on steel structures and the load assumptions that apply.

1.2 APPLICATION

This Standard specifies additional requirements for mobile and transportable conveyors that supplement and shall be applied in conjunction with the general requirements of AS/NZS 4024.3610 and the particular requirements of AS/NZS 4024.3611 or AS/NZS 4024.3612, as applicable. Where this Standard and AS/NZS 4024.3610, AS/NZS 4024.3611 and AS/NZS 4024.3612 cover the same scope, this Standard shall take precedence.

This Standard is complementary to AS 4324.1 for bulk materials handling applications. For unit handling applications, this Standard is solely applicable.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1121	Agricultural tractor power take-offs (series)
1418	Cranes, hoists and winches
1418.1	Part 1: General requirements
1418.2	Part 2: Serial hoists and winches
2759	Steel wire rope—Use, operation and maintenance
3569	Steel wire ropes—Product specification
4324	Mobile equipment for continuous handling of bulk materials
4324.1	Part 1: General requirements for the design of steel structures