

Australian Standard[®]

**Tractors—Roll-over protective
structures—Criteria and tests**

**Part 3: Mid-mounted for
narrow-track tractors**

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Department of Primary Industries, Qld
Health and Safety Organisation, Vic.
National Farmers Federation
N.S.W. Agriculture
Safety Institute of Australia
Tractor and Machinery Association of Australia
University of Melbourne
WorkCover Authority of New South Wales

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PREFACE

This Standard was prepared by the Standards Australia Committee ME/65 on Agricultural Tractors and Machinery. It lays down the performance requirements under specified test methods for mid-mounted roll-over protective structures (ROPS) for narrow-track, wheeled tractors intended to protect drivers in the event of a tractor overturning.

The Standard is based upon the Council of the European Communities Directive 87/402/EEC on roll-over protection structures mounted in front of the driver's seat on narrow-track, wheeled agricultural and forestry tractors.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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STANDARDS AUSTRALIA

Australian Standard

Tractors—Roll-over protective structures—Criteria and tests

Part 3: Mid-mounted for narrow-track tractors

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies procedures for the evaluation of mid-mounted roll-over protective structures (ROPS) for the protection of drivers of narrow-track tractors. It also sets out test procedures and minimum performance criteria for those structures.

It applies to driver-controlled tractors—

- (a) having a ground clearance not greater than 600 mm measured beneath the lowest points of the front or rear axles, allowing for the differential; and
- (b) having fixed or adjustable minimum track widths of—
 - (i) less than 1150 mm for the axle fitted with the widest tyres; and the remaining axle adjustable so that the outer edges of the tyres do not protrude beyond the outer edge of the widest tyres; and
 - (ii) less than 1150 mm for axles where wheel and tyres are all the same size.

This Standard applies to driver-controlled tractors and is not intended to apply to earth-moving machinery as defined in AS 2294. It describes two different methods of testing a ROPS: a dynamic test, which may be applied to tractors having a mass of not less than 800 kg and not greater than 3000 kg; and a static test, which may be applied to tractors having a mass of not less than 560 kg and not greater than 3000 kg.

NOTE: A ROPS is a structure whose primary purpose is to reduce the possibility of an operator from being crushed or otherwise injured in the event of a tractor rolling over. Wearing a seat belt in conjunction with using a ROPS, may provide additional protection in the event of a tractor turning over. Seat belts should comply with AS/NZS 2596 or SAE J386.

1.2 OBJECTIVE The objective of this Standard is to enable designers and manufacturers of mid-mounted ROPS to verify the design and performance of such equipment and to thus minimize the risks to the health and safety of drivers of tractors involved in a roll-over accident.

1.3 APPLICATION This Standard is intended for designers, manufacturers and testers of mid-mounted ROPS who are concerned with the design of ROPS used on narrow-track, wheeled tractors.

1.4 REFERENCED DOCUMENTS The documents below are referred to in this Standard:

- AS
2294 Earth-moving machinery—Protective structures
3569 Steel wire ropes
AS/NZS
2596 Seat belts for use in motor vehicles