

STANDARDS AUSTRALIA

---

RECONFIRMATION

OF

AS 2331.1.5—2001

Methods of test for metallic and related coatings

Method 1.5: Local thickness tests—Beta-backscatter method

---

RECONFIRMATION NOTICE

Technical Committee MT-009 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 20 March 2017.

The following are represented on Technical Committee MT-009:

Australasian Institute of Surface Finishing  
Australian Chamber of Commerce and Industry  
Australian Industry Group  
Australian Steel Institute  
Bureau of Steel Manufacturers of Australia  
Galvanizers Association of Australia  
Galvanizing Association of New Zealand  
New Zealand Metal Polishing Manufacturers

NOTES

Currently in preview, click buy full vers.

## Australian Standard™

AS 2331.1.5

---

**Methods of test for metallic and related coatings**  
**Method 1.5: Local thickness tests—**  
**Beta-backscatter method**

---

## PREFACE

This Standard was prepared by members of the Joint Standards Australia/Standards New Zealand Committee MT-009. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard. The objective of this revision is to upgrade the requirements so that they closely align with ISO 3543:1981, *Metallic and non-metallic coatings—Measurement of thickness—Beta backscatter method*.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

---

**METHOD****1 SCOPE**

This Standard specifies a method for the non-destructive measurement of coating thicknesses using beta backscatter gauges. It applies to both metallic and non-metallic coatings on both metallic and non-metallic substrates. To employ this method, the atomic numbers or equivalent atomic numbers of the coating and the substrate need to differ by an appropriate amount.

**WARNING: BETA-BACKSCATTER INSTRUMENTS USED FOR THE MEASUREMENT OF COATING THICKNESSES EMPLOY A NUMBER OF DIFFERENT RADIOACTIVE SOURCES. ALTHOUGH THE ACTIVITIES OF THESE SOURCES ARE NORMALLY VERY LOW, THEY CAN PRESENT A HAZARD TO HEALTH, IF INCORRECTLY HANDLED. THEREFORE, ALL RULES AND REGULATIONS OF LOCAL OR NATIONAL AUTHORITIES MUST BE OBSERVED.**

## NOTES:

- 1 Characteristics of isotopes used with beta-backscatter gauges are given in Appendix A.
- 2 The atomic numbers of some commonly used coatings and substrates are given in Appendix B.