

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2331.4.2—2004

**Methods of test for metallic and related coatings
Method 4.2: Physical tests—Ductility**

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 Roofing Manufacturers

NOTES

Methods of test for metallic and related coatings**Method 4.2: Physical tests—Ductility**

PREFACE

This Standard has been prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee MT-009, Metal Finishing, to supersede AS 2331.4.2—1990.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard, rather than an Australian/New Zealand Standard.

The objective of the revision for this Standard is to revise the requirements for a ductility test for determining the ductility of electroplated coatings.

METHOD**1 SCOPE**

This Standard specifies a simple bend test method for determining the ductility of electroplated coatings. This method allows the maximum percentage elongation of the coating to be determined.

NOTE: The test is particularly useful in determining the ductility of nickel deposits.

2 DEFINITION

For the purpose of this Standard, the definition below applies.

2.1 Ductility

The ability of an electroplated coating to undergo plastic or elastic deformation under specified test conditions without fracture or cracking.

3 NOTATION

The quantity symbols used in this Standard are listed below.

D = diameter of mandrel, in millimetres

E = percentage elongation of the coating

F = force

d = thickness of test piece (thickness of basis metal plus coating thickness), in millimetres