STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 1815.2—2007
Metallic materials—Rockwell hardness test
Method 2: Verification and calibration of testing machine (scales A, B, C, D, E, F, G, H, K, N, T)

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

AS 1815.2—2007
ISO 6508-2:2005
Reconfirmed 2017

Australian Standard®

Metallic materials—Rockwell hardness test

Method 2: Verification and calibration of testing machine (scales A, B, C, D, E, F, G, H, K, N, T

PREFACE

This Standard was prepared by the Standards Australia Committee MT-006, Mechanical Testing of Metals to supersede in part AS 1815.2—2002, *Metallic materials—Rockwell hardness test,* Method 2*: Verification and calibration of testing machines (scales A, B, C, D, E, F, G, H, K, N, T).*

This Standard is identical with, and has been reproduced from ISO 6508-2:2005, *Metallic materials—Rockwell hardness test*, Method 2: *Verification and calibration of testing machines (scales A, B, C, D, E, F, G, H, K, N, T).*

The objective of this Standard is to specify the method for verification and calibration of Rockwell hardness testing machines.

AS
1815 Metallic materials—Rockwell hardness test
1815.1 Method 1: Test method scales (scales A,B,C,D,E,F,G,H,K,N,T)
1815.2 Method 2: Verification and calibration of testing machines (scales A,B,C,D,E,F,G,H,K,N,T) (this Standard)
1815.3 Method 3: Calibration of reference blocks (scales A,B,C,D,E,F,G,H,K,N,T) (ISO 6508-3:2005, MOD)

1816 Metallic materials—Brinell hardness test
1816.1 Method 1: Test method (ISO 6506-1:1999, MOD)
1816.2 Method 2: Verification and calibration of testing machines
1816.3 Method 3: Calibration of reference blocks
1816.4 Method 4: Table of hardness values

1817 Metallic materials—Vickers hardness test
1817.1 Method 1: Test method (ISO 6507-1:1997, MOD)
1817.2 Method 2: Verification of testing machines
1817.3 Method 3: Calibration of reference blocks

5016 Metallic materials—Conversion of hardness values

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text ‘this part of ISO 6508’ should read ‘this Australian Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

STANDARDS Australia

References to International Standards should be replaced by references to Australian Standards as follows:

Reference to International Standard ISO		*Australian Standard* AS	
376	Metallic materials—Calibration of force-proving instruments used for verification of uniaxial testing machines	2193	Calibration and classification of force measuring systems
6507	Metallic materials—Vickers hardness test	1817	Metallic materials—Vickers hardness test
6507-1	Part 1: Test method	1817.1	Method 1: Test method (ISO 6507-1:1997, MOD)
6508	Metallic materials—Rockwell hardness test	1815	Metallic materials—Rockwell hardness test
6508-1	Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)	1815.1	Method 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)
6508-3	Part 3: Calibration of reference blocks (scales A, B, C, D, E, F, G, H, K, N, T)	1815.3	Method 3: Calibration of reference blocks (scales A, B, C, D, E, F, G, H, K, N, T) (ISO 6508-3:2005, MOD)

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

1 Scope

This part of ISO 6508 specifies a method of verification of testing machines for determining Rockwell hardness (scales A, B, C, D, E, F, G, H, K, N, T) in accordance with ISO 6508-1.

It specifies a direct method for checking the main functions of the machine operation and an indirect method suitable for the overall checking of the machine. The indirect method may be used on its own for periodic routine checking of the machine in service.

If a testing machine is also to be used for other methods of hardness testing, it shall be verified independently for each method.

This part of ISO 6508 is applicable to portable hardness testing machines.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 376:2004, *Metallic materials — Calibration of force-proving instruments used for verification of uniaxial testing machines*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)*

ISO 6508-3:2005, *Metallic materials — Rockwell hardness test — Part 3: Calibration of reference blocks (scales A, B, C, D, E, F, G, H, K, N, T)*

3 General conditions

Before a Rockwell hardness testing machine is verified, the machine shall be checked to ensure that it is properly set up in accordance with the manufacturer's instructions:

Especially it should be checked that:

a) the plunger holding the indenter is capable of sliding in its guide;