

Australian Standard™

**Calibration blocks and their methods of
use in ultrasonic testing**

This Australian Standard was prepared by Committee Current, Non-Destructive Testing of Metals and Materials. It was approved on behalf of the Council of Standards Australia on 8 June 2005. This Standard was published on 8 July 2005.

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Australasian Aerospace Non-Destructive Testing Committee
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RECONFIRMATION

OF

AS 2083—2005

Calibration blocks and their methods of use in ultrasonic testing

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NOTES

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Australian Standard™

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee MT-007, Non-Destructive Testing of Metals and Materials to supersede AS 2083—1981, *Calibration blocks and their methods of use in ultrasonic testing*. 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 this Standard is to specify the requirements for a range of ultrasonic calibration blocks and testing methods for non-destructive testing.

The objective of this revision is to revise the range of calibration blocks used in ultrasonic testing.

In the preparing of this edition of the Standard, the Committee decided to include requirements for reference blocks and blocks for use in the measurement of thickness of metal by acoustic energy.

Methods included for the calibration of ultrasonic testing equipment are considered by the Committee to be those based on accepted good practice and in widespread use, although the Committee is aware that other methods are used.

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STANDARDS AUSTRALIA

Australian Standard

Calibration blocks and their methods of use in ultrasonic testing

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for a range of calibration blocks and their methods of use in ultrasonic testing.

NOTE: Calibration blocks of different designs within this Standard may be used for equipment calibrations.

1.2 APPLICATION

Calibration blocks shall comply with the relevant requirements of Section 1 and with the specific requirements of the following Sections, as appropriate to the type of block:

Block No.1 (IIW).....	Section 2
Block No.2 (IOW)	Section 3
Block No.3	Section 4
Block No.4	Section 5
Block No.5 (Miniature Block).....	Section 6
Block No.6 (Resolution Block)	Section 7
Reference Blocks.....	Section 9
Block No.7 (Thickness Measurement)	Section 10

The methods of use shall be as specified in the relevant Section.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS	
1733	Methods for the determination of grain size in metals
1929	Non-destructive testing—Glossary of terms

1.4 DEFINITIONS

For the purpose of this Standard, the terms and definitions given in AS 1929 apply.

1.5 CONSTRUCTION OF BLOCKS

1.5.1 Material

Calibration blocks shall be manufactured from a normalized plain carbon steel of grain size No.5 or finer (refer to AS 1733).