

AS 2177.1—1994

Australian Standard<sup>®</sup>

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**Non-destructive testing—  
Radiography of welded butt joints  
in metal**

**Part 1: Methods of test**

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This Australian Standard was prepared by Committee MT/7, Non-destructive Testing of Metals and Materials. It was approved on behalf of the Council of Standards Australia on 14 June 1994 and published on 22 August 1994.

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The following interests are represented on Committee MT/7:

Australian Institute for Non-Destructive Testing  
Australian Nuclear Science and Technology Organization  
Australian Pipeline Industry Association  
AUSTROADS  
Bureau of Steel Manufacturers of Australia  
Department of Defence  
Electricity Supply Association of Australia  
Metal Trades Industry Association of Australia  
National Association of Testing Authorities, Australia  
Railways of Australia Committee  
Society of Automotive Engineers—Australasia  
Welding Technology Institute of Australia  
WorkCover Authority of N.S.W.

Additional interests participating in preparation of Standard:

Non-destructive testing service organizations  
Royal Melbourne Institute of Technology

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## PREFACE

This Standard was prepared by the Standards Australia Committee on Non-destructive Testing of Metals and Materials to supersede AS 2177.1—1981, *Radiography of welded butt joints in metal, Part 1: Methods of test*.

The second Standard in the series is AS 2177.2—1982, *Radiography of welded butt joints in metal, Part 2: Image quality indicators (IQI) and recommendations for their use*.

In this edition, cognizance was taken of the following International Standard during the revision of the clauses on gamma-ray sources, radiographic density and film coverage:

ISO 1106/3 Recommended practice for radiographic examination of fusion welded joints—Part 3: Fusion welded circumferential joints in steel pipes of up to 50 mm wall thickness.

This edition also contains a new Appendix which gives guidance on the use of the Standard.

This Standard does not cover methods which employ non-film imaging techniques. These techniques will be considered at the next revision of the Standard. The use of non-film imaging techniques for the radiographic examination of welded joints is now permitted by the ASME Boiler and Pressure Vessel Code.

The term 'informative' has been used in this Standard to define the application of the appendices. An 'informative' appendix is not an integral part of a Standard and is included for information and guidance only.

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