

Australian Standard™

**Non-destructive testing—Visual  
inspection of metal products and  
components**

This Australian Standard was prepared by Committee MT-007, Non-destructive Testing of Metals and Materials. It was approved on behalf of the Council of Standards Australia on 29 September 2003 and published on 24 November 2003.

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The following are represented on Committee MT-007:

Australasian Railway Association  
Australian Aerospace Non-Destructive Testing Committee  
Australian Industry Group  
Australian Institute for Non-Destructive Testing  
Australian Nuclear Science & Technology Organization  
Australian Pipeline Industry Associations  
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**Non-destructive testing—Visual  
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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 3978—1991, *Non-destructive testing—Visual inspection of metal products and components*. 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 Standard is to establish requirements for the visual inspection for purchasers of metal products and components and the requirements for the qualification of personnel.

The objective of this revision is to incorporate new requirements for specifying procedures for visual inspection.

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.

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## STANDARDS AUSTRALIA

## Australian Standard

## Non-destructive testing—Visual inspection of metal products and components

**1 SCOPE**

This Standard specifies procedures for visual inspection of metal products and components, with specific reference to welded components, steel castings, and corroded metal surfaces. Procedures for conducting visual inspection under water may also be developed from this Standard.

This Standard specifies requirements for the qualification of inspectors, for the viewing and illumination of items being inspected, and makes recommendations for the use of approved visual aids to optimize recognition of surface features.

The qualifications for personnel to perform visual examinations are specified in AS 3998.

Requirements on information to be supplied by the purchaser at the time of inquiry or order are contained in Appendix A.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

## AS

1171	Non-destructive testings—Magnetic particle testing of ferromagnetic products, components and structures
1627	Metal finishing—Preparation and pretreatment of surfaces
1627.1	Part 1: Removal of oil, grease and related contamination
1627.2	Part 2: Power tool cleaning
1627.4	Part 4: Abrasive blast cleaning
1627.5	Part 5: Pickling
1627.9	Part 9: Pickling surface preparation standards for painting steel surfaces
1680	Interior lighting (series)
1988	Welding of steel castings
2062	Non-destructive testing—Penetrant testing of products and components
2177	Non-destructive testing—Radiography of welded butt joints in metal
2177.1	Part 1: Methods of test
2207	Non-destructive testing—Ultrasonic testing of fusion welded joints in carbon and low alloy steel
2812	Welding, brazing and cutting of metals—Glossary of terms
3998	Non-destructive testing—Qualification and certification of personnel (ISO 9712).

## ISO

3058	Non-destructive testing—Aids to visual inspection—Selection of low-power magnifiers
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