

Australian Standard™

**Non-destructive testing— Qualification  
and certification of personnel**

**STANDARDS**  
Australia



This Australian Standard was prepared by Committee MT-007, Non-destructive Testing of Metals and Minerals. It was approved on behalf of the Council of Standards Australia on 2 February 2006.  
This Standard was published on 15 March 2006.

---

The following are represented on Committee MT-007:

Australian Railways Association  
Australasian Aerospace Non-destructive Testing Committee  
Australian Industry Group  
Australian Institute for Non-Destructive Testing  
ANSTO  
Australian Pipeline Association  
Bureau of Steel Manufacturers of Australia  
Engineers Australia  
Industrial Research Limited  
NATA  
New Zealand Non-Destructive Testing Association  
TestSafe Australia  
Victoria WorkCover  
Welding Technology Institute of Australia

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.org.au](mailto:mail@standards.org.au), or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

Australian Standard™

**Non-destructive testing—Qualification  
and certification of personnel**

Original date AS 3998—1992.  
Previous edition 2002.  
Third edition 2006.

**COPYRIGHT**

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7318 4

## PREFACE

This Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee MT-007, Non-destructive Testing of Metals and Materials to supersede AS 3998—2002. 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.

This Standard is identical with and has been reproduced from ISO 9712:2005, *Non-destructive testing—Qualification and certification of personnel*.

The objective of this Standard is to specify a system for the qualification and certification of personnel in general industry who are involved in non-destructive testing.

The objective of this revision is to adopt the current edition of ISO 9712.

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

- (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 International Standard’ should read ‘this Australian Standard’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

Although this Standard is applicable to aerospace in-service inspection, Standards Australia has issued a separate Australian Standard, AS 3669, *Non-destructive testing—Qualification and registration of personnel—Aerospace*, to cover the aerospace industry. AS 3669 is technically equivalent to EN 4179 and NAS 410.

References to International Standards should be replaced by references to equivalent Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard	Australian Standard
ISO/IEC	AS ISO/IEC
17024 Conformity assessment—General requirements for bodies operating certification of persons	17024 Conformity assessment—General requirements for bodies operating certification of persons

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.

## CONTENTS

	<i>Page</i>
<b>1</b> <b>Scope</b> .....	<b>1</b>
<b>2</b> <b>Normative references</b> .....	<b>1</b>
<b>3</b> <b>Terms and definitions</b> .....	<b>2</b>
<b>4</b> <b>Symbols and abbreviated terms</b> .....	<b>3</b>
<b>5</b> <b>Responsibilities</b> .....	<b>5</b>
<b>6</b> <b>Levels of qualification</b> .....	<b>7</b>
<b>7</b> <b>Eligibility</b> .....	<b>9</b>
<b>8</b> <b>Qualification examination — Content and grading</b> .....	<b>11</b>
<b>9</b> <b>Qualification examination — Conduct</b> .....	<b>14</b>
<b>10</b> <b>Certification</b> .....	<b>15</b>
<b>11</b> <b>Files</b> .....	<b>17</b>
<b>12</b> <b>Introduction of new NDT methods or sectors</b> .....	<b>18</b>
<b>Annex A</b> (informative) <b>Sectors</b> .....	<b>19</b>
<b>Annex B</b> (normative) <b>Specimen master report</b> .....	<b>20</b>
<b>Annex C</b> (normative) <b>Level 1 and 2 specimens</b> .....	<b>21</b>
<b>Annex D</b> (informative) <b>Weighting of Level 1 and 2 practical examinations</b> .....	<b>22</b>
<b>Annex E</b> (informative) <b>Weighting of Level 3 NDT procedure examination</b> .....	<b>23</b>
<b>Annex F</b> (normative) <b>Structured credit system for Level 3 recertification</b> .....	<b>24</b>
<b>Bibliography</b> .....	<b>25</b>

## INTRODUCTION

Since the effectiveness of any application of non-destructive testing (NDT) depends upon the capabilities of the persons who perform or are responsible for the test, a procedure was developed to provide a means for evaluating and documenting the competence of personnel whose duties require the appropriate theoretical and practical knowledge of the non-destructive tests that they perform, specify, supervise, monitor or evaluate. An added incentive stems from the world-wide comparability of a wide range of industrial applications requiring common non-destructive testing approaches.

When certification of NDT personnel is defined in product standards, regulations, codes or specifications, it is important to certify the personnel in accordance with this International Standard. Where latitude is provided in the criteria within this International Standard, the certification body has the final decision in determining specific requirements.

AUSTRALIAN STANDARD

# Non-destructive testing — Qualification and certification of personnel

## 1 Scope

This International Standard specifies the qualification and certification of personnel involved in non-destructive testing (NDT). It is applicable to proficiency in one or more of the following methods:

- acoustic emission testing;
- eddy current testing;
- infrared thermographic testing;
- leak testing (hydraulic pressure tests excluded);
- magnetic particle testing;
- penetrant testing;
- radiographic testing;
- strain testing;
- ultrasonic testing;
- visual testing (direct unaided visual tests and visual tests carried out during the application of another NDT method are excluded).

Certification to this International Standard provides an attestation of general competence of the NDT operator. It does not represent an authorization to operate, since this remains the responsibility of the employer, and the certified employee may require additional specialized knowledge of parameters such as equipment, NDT procedures, materials and products of the employer. Where required by regulatory requirements and codes, the authorization to operate will be given in writing by the employer in accordance with a quality procedure that defines any employer-required job-specific training and examinations designed to verify the certificate holder's knowledge of relevant industry code(s), standard(s), NDT procedures, equipment, and acceptance criteria for the tested products.

The system specified by this International Standard could also be applicable to other NDT methods, where independent certification programs exist.

NOTE Wherever the gender-specific word "his" or "he" appears in this International Standard, the feminine form "her" or "she" is equally applicable.

## 2 Informative 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/IEC 17024, *Conformity assessment — General requirements for bodies operating certification of persons*