

AS/NZS 3669:2025
EN 4179:2021



STANDARDS
Australia

Australian/New Zealand Standard™

Aerospace — Qualification and approval of personnel for non-destructive testing (EN 4179:2021, IDT)

This national standard is the identical adoption of EN 4179:2021 with the permission of the European Committee for Standardization — CEN, Rue de la Science 23, B — 1040 Brussels, Belgium.



AS/NZS 3669:2025

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee MT-007, Non-Destructive Testing Of Metals And Materials. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 12 May 2025 and by the New Zealand Standards Approval Board on 02 April 2025.

This Standard was published on 23 May 2025.

The following are represented on Committee MT-007:

- Australasian Thermographers Association
- Australian Institute for Non-Destructive Testing
- Australian Professional Thermography Association
- Austrroads
- Bureau of Steel Manufacturers of Australia
- Institute of Electrical Inspectors
- International Accreditation New Zealand
- Materials Australia
- National Aerospace Non-Destructive Testing Board of Australia
- National Association of Testing Authorities Australia
- New Zealand Defence Force
- New Zealand Non-Destructive Testing Association
- The University of Sydney
- Weld Australia

This Standard was issued in draft form for comment as DR AS/NZS 3669:2025.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

www.standards.govt.nz

ISBN 978 1 76175 173 8

Australian/New Zealand Standard™

**Aerospace — Qualification
and approval of personnel for
non-destructive testing (EN
4179:2021, IDT)**

Originates as AS 3669—1989.
Previous edition 2006.
Fifth edition 2025.

© CEN 2025 — All rights reserved
© Standards Australia Limited/the Crown in right of New Zealand, administered by the New Zealand Standards Executive 2025

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, unless otherwise permitted under the Copyright Act 1968 (Cth) or the Copyright Act 1994 (New Zealand).

How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

- (a) "should" means that something is recommended.
- (b) "may" means that something is permitted.
- (c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

- (i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.
- (ii) The Scope states what the Standard is about, what it covers and what it does not cover.
- (iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.
- (iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

- (1) A normative appendix sets additional requirements that need to be conformed to.
- (2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.
- (3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MT-007 Non-Destructive Testing of Metals and Materials to supersede AS 3669:2006.

The objective of this document is to establish the minimum requirements for the qualification and certification of personnel performing non-destructive testing (NDT), non-destructive inspection (NDI), or non-destructive evaluation (NDE) in the aerospace manufacturing, service, maintenance and overhaul industries.

For the purposes of this document, the term NDT will be used and will be considered equivalent to NDI and NDE.

In Europe, the term “approval” is used to denote a written statement by an employer that an individual meets specific requirements and has operating approval. The term “certification” as defined in 3.2 is used throughout this document as a substitute for the term “approval”. Except when otherwise specified in the written practice, certification in accordance with this document includes operating approval.

This document is identical to, and has been reproduced from, EN 4179:2011, *Aerospace series - Qualification and approval of personnel for non-destructive testing*.

As this document has been reproduced from an international document, a comma is to be read as a full point when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

Contents

Preface	iii
European foreword	vi
Introduction	vii
1 Scope	1
1.1 Purpose.....	1
1.2 Applicability.....	1
1.2.1 General.....	1
1.2.2 Implementation.....	1
1.3 Test Methods.....	1
1.3.1 Common test methods.....	1
1.3.2 Other test methods.....	2
2 Normative references	2
3 Terms and definitions	2
4 General requirements	6
4.1 Written practice.....	6
4.1.1 Qualification and certification.....	6
4.1.2 Additional requirements.....	6
4.1.3 NDT techniques.....	7
4.1.4 Training outlines.....	7
4.1.5 Examination practices.....	7
4.1.6 Administration.....	7
4.1.7 Records.....	7
4.2 Test Methods.....	7
4.3 Responsibility.....	7
4.3.1 General.....	7
4.3.2 Responsible Level 3 person.....	7
4.3.3 Outside agency.....	8
5 Qualification and certification levels	8
5.1 Levels of qualification and certification.....	8
5.1.1 General.....	8
5.1.2 Trainee.....	8
5.1.3 Level 1-Limited.....	9
5.1.4 Level 1.....	9
5.1.5 Level 2.....	9
5.1.6 Level 3.....	10
5.1.7 Auditor.....	10
6 Training and experience	10
6.1 Training.....	10
6.1.1 General.....	10
6.1.2 Training outlines.....	11
6.1.3 Previous training.....	12
6.1.4 Equivalent training.....	12
6.1.5 Health and safety training.....	12
6.2 Training and examination personnel.....	12
6.2.1 Responsible Level 3 person.....	12
6.2.2 Examiners.....	12
6.2.3 Instructors.....	13
6.2.4 Outside agencies.....	13
6.3 Experience.....	13
6.3.1 General.....	13
6.3.2 Previous experience.....	13
6.3.3 Equivalent experience.....	13

6.4	Emerging NDT methods	14
6.4.1	Minimum hours	14
6.4.2	Levels 1 and 2	14
6.4.3	Level 3	15
7	Examinations	15
7.1	Purpose	15
7.1.1	General	15
7.1.2	Vision examination	15
7.1.3	General examination	15
7.1.4	Specific examination	15
7.1.5	Practical examination	17
7.2	Administration of examinations	18
7.2.1	General	18
7.2.2	Administration by an outside agency	18
7.2.3	Scoring	19
7.2.4	Re-examination	19
8	Certification	19
8.1	General	19
8.2	Records	19
8.2.1	Minimum requirements	19
8.2.2	Record availability	20
8.3	Loss of certification	20
8.3.1	Expiration	20
8.3.2	Suspension	20
8.3.3	Revocation	20
8.4	Reinstatement of certification	21
8.5	Recertification	21
8.5.1	Level 1 and Level 2	21
8.5.2	Level 3	21
8.5.3	Hands-on practical examination	21
8.6	Annual proficiency review	21
Appendix A (normative) Credit system for recertification of Level 3 NDT personnel		22
Appendix B (normative) Qualification and certification of Level 1-Limited		25
Appendix C (normative) National aerospace non-destructive testing boards (NANDTB)		28
Bibliography		30

European foreword

This document (EN 4179:2021) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 4179:2017.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

Introduction

In the event of a conflict between the text of this document and the references cited herein, the requirements of this document take precedence. Nothing in this document supersedes applicable laws and regulations unless a specific exemption has been obtained.

Currently in preview, click buy full version

NOTES

Currently in preview, click buy full version

Australian/New Zealand Standard

Aerospace — Qualification and approval of personnel for non-destructive testing (EN 4179:2021, IDT)

1 Scope

1.1 Purpose

This document establishes the minimum requirements for the qualification and certification of personnel performing non-destructive testing (NDT), non-destructive inspection (NDI), or non-destructive evaluation (NDE) in the aerospace manufacturing, service, maintenance and overhaul industries. For the purposes of this document, the term NDT will be used and will be considered equivalent to NDI and NDE.

In Europe, the term “approval” is used to denote a written statement by an employer that an individual meets specific requirements and has operating approval. The term “certification” as defined in [3.2](#) is used throughout this document as a substitute for the term “approval”. Except when otherwise specified in the written practice, certification in accordance with this document includes operating approval.

1.2 Applicability

1.2.1 General

This document applies to personnel using NDT methods to test and/or accept materials, products, components, assemblies or sub-assemblies. This document also applies to personnel: directly responsible for the technical adequacy of the NDT methods used, who approve NDT procedures and/or work instructions, who audit NDT facilities, or who provide technical NDT support or training.

This document does not apply to individuals who only have administrative or supervisory authority over NDT personnel or to research personnel developing NDT technology for subsequent implementation and approval by a certified Level 3.

Personnel performing specialized inspections using certain direct readout instruments as determined by a Level 3 person certified in the test method, do not require qualification or certification to this document.

1.2.2 Implementation

This document addresses the use of a National Aerospace NDT Board (NANDTB). NANDTBs are only used as specified according to [Annex C](#) and it is not mandatory to have such a board for compliance with this document. Personnel certified to previous revisions of NAS 410 or EN 4179 need not recertify to the requirements of this document until their current certification expires.

1.3 Test Methods

1.3.1 Common test methods

This document contains detailed requirements for the following common NDT methods:

Eddy Current Testing	(ET)
Magnetic Particle Testing	(MT)
Penetrant Testing	(PT)
Radiographic Testing	(RT)