Guide to Qualification and Certification Non-Destructive Testing



Issue 22 Rev 04 February 2023

A.B.N. 21 005 040 835

NDT Certification Board PO Box 52. Parkville, VIC 3052

Phone: 03 9486 9267

ndtcertification@aindt.com.au



Phone: (03) 9486 9267 Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

Contents

1 GE	NERAL INFORMATION	5
1.1 INTR	ODUCTION	5
1.2 THE	AINDT CERTIFICATION BOARD	5
1.3 SCOF	PE	6
1.4 REFE	RENCES	6
1.4.1	Standards	6
1.5 TERM	MS AND DEFINITIONS	6
1.5.1	Authorised qualification body	6
1.5.2	Basic examination	6
1.5.3	Candidate	6
1.5.4	Certificate	6
1.5.5	Certification	6
1.5.6	Certification body	6
1.5.7	Employer	7
1.5.8	Examination centre	7
1.5.9	Examiner	7
1.5.10	General examination	7
1.5.11	Industrial experience	7
1.5.12	Invigilator	7
1.5.13	Job-specific training	7
1.5.14	Main-method examination	
1.5.15	Multiple choice examination question	
1.5.16	NDT instruction	
1.5.17	NDT method	
1.5.18	NDT procedure	
1.5.19	NDT technique	
1.5.20	NDT training	
1.5.21	Operating authorisation	
1.5.22	Practical examination	
1.5.23	Qualification	
1.5.24	Qualification examination	
1.5.25	Qualified supervision	
1.5.26	Sector	
1.5.27	Significant interruption	
1.5.28	Specific examination	
1.5.29	Specification	
1.5.30	Specimen	
1.5.31	Specimen master report	
1.5.32	Structured Experience Program (SEP)	
Progran	n approved by the certification body to reduce industrial experience	
1.5.33	Supervision	
1.5.34	Validation	
1.5.35	Renewal	
1.5.36	Recertification	
1.5.37	Work Activity	
	NFORMATION	
	PONSIBILITIES	
1.6.1	Responsibilities of the Certification Body (AINDT)	
1.6.2	Responsibility of the Employer	
1.6.3	In respect of certified personnel under their control, the employer shall be responsible for:	
1.6.4	Authorised qualification body	
1.6.5	Examination centre responsibilities	
1.6.6	Candidate responsibilities	



1.6.7

PO Box 52, Parkville, Victoria 3052

NDT CERTIFICATION BOARD		Phone: (03) 9486 9267
NOT CERTIFICATION BOARD	Website: www.aindt.com.au	Email: ndtcertification@aindt.com.au
Certificate holder's responsibilities		11

2.1 LEV	EL 1	
2.2 LEV	EL 2	
2.3 LEV	EL 3	
3 QI	JALIFICATION AND CERTIFICATION	14
3.1 ND7	CERTIFICATIONS AVAILABLE	12
	ITED NDT QUALIFICATION UNDER ISO 20807	
	T TREATMENT CERTIFICATION	
3.4 CER	TIFICATION REQUIREMENTS	
3.5 VISI	ON REQUIREMENTS	
	TRAINING	
3.7 IND	USTRIAL NDT EXPERIENCE	
3.7.1	Level 1 and Level 2	
3.7.2	Level 3	
3.7.3	Possible reductions	
3.7.4	Referee Suitability	
	IIMUM NDT TRAINING & EXPERIENCE (CUMULATIVE TOTALS) – ISO 9712 IIMUM TRAINING & EXPERIENCE FOR LIMITED APPLICATION –ISO 20807	
	REQUISITES FOR LIMITED APPLICATION QUALIFICATION TO ISO 20807	
	Tank Bottom Testing (TBT)	
	IIMUM TRAINING & EXPERIENCE – HEAT TREATMENT – AINDT HT-01	
	INEE	
	MODULE DESCRIPTORS	
	ANGEMENTS FOR NDT EXAMINATIONS	
3.15 UNS	CHEDULED EXAMINATIONS	21
	SIT EXAMINATIONS	
	TIFICATION AND PERIOD OF VALIDITY	
	EWAL OF CERTIFICATION	
_	ERTIFICATION	
3.19 23	100 0740 NDT All 4	0.5
3.19.1	ISO 9712 NDT All Levels	
3.19.2 3.19.3	ISO 9712 Levels 1 & 2 Practical Examination	
3.19.5	Structured Credit System	
	Lapsed Qualifications/Certifications	
	MINATION ONLY (AEROSPACE)	
	ERTIFICATION FROM AS 3998/ISO 9712 MT / PT WELDS TO MULTISECTOR	
	,	
4 FE	ES	28
4.1 APP	LICATION FORMS	28
4.2 APP	LICATION FEES	28
4.3 EXA	MINATION FEES	28
4.4 REN	EWAL / RECERTIFICATION FEES	28
	N-ATTENDANCE AT EXAMINATIONS	
	DE OF ETHICS	
_		
4.5 NON 4.6 COE 4.7 REP 4.8 REF 4.8.1 4.8.2	I-ATTENDANCE AT EXAMINATIONS	

Australian Institute for Non-destructive Testing



PO Box 52, Parkville, Victoria 3052

Phone: (03) 9486 9267

	Website: www.aindt.com.au	Email: ndtcertification@aindt.com.au
--	---------------------------	--------------------------------------

5.1	REQ	UIREMENTS FOR ISO 9712 - LEVEL 1	30
5	.1.1	General Examination Level 1	30
5	.1.2	Specific Examination Level 1	30
5	.1.3	Practical Examination Level 1	30
5	.1.4	Practical Examination Duration and Assessment:	31
5.2	REQ	UIREMENTS FOR ISO 9712 - LEVEL 2	31
5	.2.1	General Examination Level 2	31
5	.2.2	Specific Examination Level 2	
5	.2.3	Practical Examination Level 2	32
5	.2.4	Practical Examination Duration and Assessment:	
5	.2.5	Advanced Techniques	
_	.2.6	Examination Exemptions – ISO 9712 - Level 1 and 2	
5.3	REQ	UIREMENTS FOR ISO 9712 - LEVEL 3	
5	.3.1	Basic Examination Level 3	
5	.3.2	Main Method Examination Level 3	
5	.3.3	Practical Examination Level 3	
_	.3.4	Examination Exemptions: ISO 9712 - Level 3	
	.3.5	Limited NDT Qualification - Requirements for ISO 20807	
	.3.6	Heat Treatment of Welds in Steel Using Electrical Resistance Equipment – AINDT HT-01	
5	.3.7	Candidate Requirements for examinations	37
6	IN	TERNATIONAL QUALIFICATIONS	38
6.1	ΔΡΡ	RAISAL OF QUALIFICATIONS AND EXPERIENCE	39
6.2		SONAL INTERVIEW	
0.2	, _,,,		
7	SP	PECIAL ARRANGEMENTS	39
7.1	FLIR	OPEAN PRESSURE EQUIPMENT DIRECTIVE (PED) APPROVAL	39
7.2		LTILATERAL RECOGNITION AGREEMENT WITH ICNDT/EFNDT	
7.2	IVIOI	ETEATENAL NECOCIOTA ONE EMENT WITH CND 1/ ET ND 1	
8	W	ITHDRAWAL OF CERTIFICATION	40
8.1	MAIC	REPRESENTATION OF CERTIFICATION	40
8.2		TIFICATION WITHDRAWAL	
8.3		DT CODE OF ETHICS	
0.5	AIIVI	UT CODE OF ETTIICS	40
9	CC	OMPLAINTS AND APPEALS	40
Δ	NNFX	A- AINDT FXAMINATION CONTENT	Δ 1



PO Box 52, Parkville, Victoria 3052 Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

1 GENERAL INFORMATION

1.1 INTRODUCTION

The Qualification and Certification of Non-Destructive Testing Personnel is carried out in accordance with the international standards ISO 9712-2021 and ISO 20807-2004.

The National Certification Body managing certification to ISO 9712 and ISO 20807 is the Australian Institute for Non-Destructive Testing (AINDT) Certification Board.

The purpose of this Guide is to provide information for NDT practitioners and other interested parties on the requirements, procedures and arrangements that apply to the ISO 9712 and ISO 20807 Qualification and Certification Schemes.

The AINDT is now offering an in-house limited qualification scheme for operators of electrical resistance equipment to heat treat welds in steel. Certification of this process has been based on the general requirements of AS 4635/ISO 20807.

NOTE: All references to standards in this document relate to the latest edition of that standard.

1.2 THE AINDT CERTIFICATION BOARD

AINDT operates the qualification and certification scheme through the National Certification Board.

The Federal Council (FC) of the AINDT constitutes a Certification Board (CB) and delegates to it the responsibility for maintaining a management overview of the operations of its Certification Services Division (CSD). Membership of AINDT boards and committees is open to the participation of financial members and individuals representing stakeholder organisations. Further information on the work of committees and committee membership is available from The Certification Services Division of the AINDT. The CB fulfils the requirement for a Scheme Committee in terms of ISO/IEC 17024 (Personnel Certification)

The AINDT NDT Certification Board (Scheme Committee) comprises:-

- The Chairman (an independent person with considerable NDT experience).
- The Manager, Certification Services (CSM, AINDT Employee).
- The Certification Board Honorary Secretary.
- The Chairman of the Panel of Examiners.
- The Chairman of the Applications committee.
- Impartial representatives of stakeholder organisations (approved by the AINDT Federal Council) to ensure a balanced scheme and may include sister NDT societies, NDT providers, NDT users, NDT trainers, National Association of Testing Authorities (NATA), Australian Institute for Certification of Inspection Personnel (AICIP), Standards Australia, and Certificated persons.
- Representative of other Certification Bodies as deemed appropriate by the AINDT

The Certification Board is supported by a CSD and:

- A Panel of Examiners. This panel, under the direction of its Chairman is responsible for the database of examination questions and the management of the AINDT's database listing, of approved examiners.
- An Applications Committee. This sub-committee of the CB meets at the direction of the CSM for the review and appraisal of NDT qualification/certification applications.-The CSM, under approval of the CB, may undertake these duties solely as part of his/her responsibilities or in conjunction with the applications committee as the CB deems appropriate. The applications committee will appoint one or



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

more of its members to review the applications process undertaken by the CSD at least yearly and provide a written report to the CB confirming the CSD's compliance to AINDT NDT CB policy or any deviations and the respective corrective actions implemented.

Certification decisions for NDT personnel are the responsibility of the Certification Board and are not delegated or subcontracted to another body.

The AINDT has been accredited by the Joint Accreditation Scheme of Australia and New Zealand (JAS-ANZ) as a Certifying Body in accordance with ISO 17024. The JAS-ANZ Accreditation Number is P2120700AM.

1.3 SCOPE

This document describes the AINDT process for the qualification and certification of personnel who perform industrial non-destructive tests.

Specific details of the certification available at each level in the various NDT methods and industry/product sectors are contained within this document.

1.4 REFERENCES

1.4.1 Standards

ISO/IEC17024: General requirements for bodies operating certification systems of persons

CEN ISO/TR 25107: Non-destructive testing – Guidelines for NDT training syllabuses (ISO/TR 25107)

CEN ISO/TR 25108: Non-destructive testing – Guidelines for NDT personnel training organisations (ISO/TR 25108)

ISO 9712-2021: Non-destructive testing - Qualification and certification of personnel

1.5 TERMS AND DEFINITIONS

For the purposes of this document, the following terms and definitions apply. For additional applicable definitions refer to ISO 9712.

1.5.1 Authorised qualification body

Body, independent of the employer, authorised by the certification body to prepare and administer examinations

1.5.2 Basic examination

Written examination, at Level 3, which demonstrates the candidate's knowledge of the materials science and process technology and types of discontinuities, the specific qualification and certification system, and the basic principles of NDT methods as required for Level 2

1.5.3 Candidate

Individual seeking qualification and certification who gains experience under the supervision of personnel having a qualification acceptable to the certification body

1.5.4 Certificate

Document or digital medium issued by the certification body under specified provisions, indicating that the named person has demonstrated the competence(s) defined on the certificate, and has met all the requirements for certification

1.5.5 Certification

Procedure used by the certification body to confirm that the qualification requirements for a method, level and sector have been fulfilled, leading to the issuing of a certificate

1.5.6 Certification body

Body that administers procedures for certification according to specified requirements



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

1.5.7 Employer

Organisation for which the candidate works on a regular basis

Note: an employer can also be a candidate at the same time.

1.5.8 Examination centre

Centre approved by the certification body where qualification examinations are carried out

1.5.9 Examiner

Person certified to Level 3 in the method for which they are authorised by the certification body to conduct, supervise and grade the qualification examination

1.5.10 General examination

Written examination, at Level 1 or Level 2, concerned with the principles of an NDT method

1.5.11 Industrial experience

Experience, acceptable to the certification body, gained under qualified supervision, in the application of the NDT method in the sector concerned, needed to acquire the skill and knowledge to fulfil the provisions of qualification

1.5.12 Invigilator

Person authorised by the certification body to supervise examinations

1.5.13 Job-specific training

Training, provided by the employer (or his agent) to the certificate holder in those aspects of non-destructive testing specific to the employer's products, NDT equipment, NDT procedures, and applicable codes, standards, specifications and procedures, leading to the award of operating authorisations

1.5.14 Main-method examination

Written examination, at Level 3, which demonstrates the candidate's general and specific knowledge, and the ability to write NDT procedures for the NDT method as applied in the industrial or product sector(s) for which certification is sought

1.5.15 Multiple choice examination question

Wording of a question giving rise to four potential replies, only one of which is correct, the remaining three being incorrect or incomplete

1.5.16 NDT instruction

Written description of the precise steps to be followed in testing to an established standard, code, specification or NDT procedure

1.5.17 NDT method

Discipline applying a physical principle in Non-destructive Testing

Example Ultrasonic testing.

1.5.18 NDT procedure

Written description of all essential parameters and precautions to be applied when non-destructively testing products in accordance with standard(s), code(s) or specification(s)

1.5.19 NDT technique

Specific way of utilising an NDT method

Example Immersion ultrasonic testing



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

1.5.20 NDT training

Process of instruction in theory and practice in the NDT method in which certification is sought, which takes the form of training courses to a syllabus approved by the certification body

1.5.21 Operating authorisation

Written statement issued by the employer, based upon the scope of certification, authorising the individual to carry out defined tasks

Note: such authorisation can be dependent on the provision of job-specific training.

1.5.22 Practical examination

Assessment of practical skills, in which the candidate demonstrates familiarity with, and the ability to perform, the test

1.5.23 Qualification

Demonstration of physical attributes, knowledge, skill, training and experience required to properly perform NDT tasks

1.5.24 Qualification examination

Examination, administered by the certification body or the authorised qualification body, which assesses the general, specific and practical knowledge and the skill of the candidate

1.5.25 Qualified supervision

Supervision of candidates gaining experience by NDT personnel certified in the same method under supervision or by non-certified personnel who, in the opinion of the certification body, possess the knowledge, skill, training, and experience required to properly perform such supervision

1.5.26 Sector

Particular section of industry or technology where specialised NDT practices are used, requiring specific product-related knowledge, skill, equipment or training

Note: A sector can be interpreted to mean a product (welded products, castings) or an industry (aerospace, inservice testing).

1.5.27 Significant interruption

Absence or change of activity which prevents the certified individual from practising the duties corresponding to the level in the method and the sector(s) within the certified scope, for either a continuous period in excess of one year or two or more periods for a total time exceeding two years

Note: Legal holidays or periods of sickness or courses of less than 30 days are not taken into account when calculating the interruption.

1.5.28 Specific examination

Written examination, at Level 1 or Level 2, concerned with testing techniques applied in a particular sector(s), including knowledge of the product(s) tested and of codes, standards, specifications, procedures and acceptance criteria

1.5.29 Specification

Document stating requirements



Phone: (03) 9486 9267 Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

1.5.30 Specimen

Sample used in practical examinations, possibly including radiographs and data sets, which is representative of products typically tested in the applicable sector

Note: A specimen can include more than one area or volume to be tested.

1.5.31 Specimen master report

Model answer, indicating the optimum result for a practical examination given a defined set of conditions (equipment type, settings, technique, specimen, etc.) against which the candidate's test report is graded

1.5.32 Structured Experience Program (SEP)

Program approved by the certification body to reduce industrial experience

1.5.33 Supervision

Act of directing the application of NDT performed by other NDT personnel, which includes the control of actions involved in the preparation of the test, performance of the test and reporting of the results

1.5.34 Validation

Act of demonstrating that a verified procedure works in practice and fulfils its intended function, normally achieved by actual witnessing, demonstration, field or laboratory tests or selected trials

1.5.35 Renewal

Procedure for revalidation of a certificate without examination at any time up to five years after success in an initial, supplementary or recertification examination

1.5.36 Recertification

Procedure for revalidation of a certificate by examination or by otherwise satisfying the certification body that the published criteria for recertification are satisfied.

1.5.37 Work Activity

Performance of NDT related functions and tasks

FURTHER INFORMATION

NDT practitioners, and other interested parties seeking more information or current application forms are asked to contact:

The Certification Administrator, AINDT Certification Board at the Federal Office:

Mail: PO Box 52 Parkville Vic, 3052 Telephone: +61 3 93268 8831

Fax: +61 3 9328 8787

Email: ndtcertification@aindt.com.au

Alternatively, application forms, and a copy of this guide can be downloaded from the Institute's website – www.aindt.com.au



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

1.6 RESPONSIBILITIES

1.6.1 Responsibilities of the Certification Body (AINDT)

AINDT will fulfil the requirements of ISO/IEC 17024 and will ensure that the AINDT Scheme(s) for qualification and certification of personnel, are controlled and operated so as to ensure, amongst other things, that they are impartial, and that decisions taken and implemented at all levels, including management and committees, are free from commercial or other pressures that may prevent the objective provision of certification services.

Applicants are required to pass written and practical examinations in the relevant NDT method, product and industry sector depending upon the level of certification sought.

These examinations may be conducted by AINDT or by an Authorised Qualifying Body (AQB). Candidates may sit AINDT approved examinations through AQBs or a CB Approved Examination Centre (AEC). Examination fees for AINDT examinations are published in the AINDT's "Schedule of Fees – NDT" document. AQB fees and charges can be obtained from the appropriate AQB, a list of AQB's by state is available on the AINDT web site.

Applicants are expected to finalise qualification and certification no later than **five (5) years** from the date of examination. Applicants who have not finalised certification after 5 years has elapsed from the first examination date or have failed a second resit shall be required to sit all examinations as for a new candidate. Applicants who can prove exceptional circumstances may have an exemption granted by the CB but may be required to resit the practical exam. Initial certifications will have an expiry date five (5) years from the date of successful practical examination.

1.6.2 Responsibility of the Employer

An AINDT method specific certificate does not authorise the individual to perform work. It is the employer's responsibility to ensure the certificated person is appropriately trained and experienced to conduct specific job tasks. This may involve specific training in company test procedures, use of specialised equipment, OH&S processes etc.

Some tasks associated with, or are a necessary precursor to the NDT test may require specific licenses from regulatory bodies, e.g. licence to operate radioactive isotopes, electrical registration and licence to work on live systems.

Note: where the certificated person is self-employed then they assume the same responsibility of an employer.

ISO 9712 identifies employer responsibilities including:

The employer shall confirm the validity of the personal information provided by the candidate to the AINDT or the authorised qualifying body. This information shall include the declaration of education, training and experience needed to determine the eligibility of the candidate. If the candidate is unemployed or self-employed, the declaration of education, training and experience shall be attested to by one or more independent parties.

1.6.3 In respect of certified personnel under their control, the employer shall be responsible for:

- All that concerns the authorisation to operate, i.e. providing job-specific training (if necessary)
- Issuing the written authorisation to operate
- The results of NDT operations
- Ensuring that the annual visual acuity requirements are met
- Verifying continuity in the application of the NDT method without significant interruption
- Ensuring that personnel hold valid certification and approvals relevant to their tasks within the organisation
- Maintaining appropriate records.



PO Box 52, Parkville, Victoria 3052 Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

1.6.4 Authorised qualification body

Where established, the authorised qualification body shall:

- Work under the control of and apply the specifications issued by AINDT
- Be independent of any single predominant interest
- Ensure that it is impartial with respect to each candidate seeking qualification, bringing to the attention of AINDT any actual or potential threat to its impartiality
- Apply a documented quality management system /audited/approved by AINDT
- Have the resources and expertise necessary to establish, monitor and control examination centres, including examinations and the calibration and control of the equipment
- Prepare, supervise and administer examinations under the responsibility of an examiner authorised by AINDT
- Maintain appropriate qualification and examination records according to the requirements of AINDT.

1.6.5 Examination centre responsibilities

Where established the examination centre shall:

Work under the control of AINDT or authorised qualification body

An examination centre can be situated at an employer's premises. In this case, AINDT shall require additional controls to preserve impartiality and the examinations shall be conducted only in the presence of, and under the control of, an authorised representative of the AINDT.

1.6.6 Candidate responsibilities

Candidates, whether employed, self-employed or unemployed shall:

- Provide documentary evidence of satisfactory completion of a course of training
- Provide evidence of successful completion of an AINDT examination/s
- Provide verifiable documentary evidence that the required experience has been gained under qualified supervision
- Provide documentary evidence of vision satisfying the requirements of AINDT;

1.6.7 Certificate holder's responsibilities

Certificate holders shall:

- Abide by a code of ethics published by the certification body
- Undergo an annual test of visual acuity in accordance with 7.4 a), and submit the results of tests to the employer
- Notify the certification body and the employer in the event that the conditions for validity of certification are not fulfilled.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

2 LEVELS OF QUALIFICATION

2.1 LEVEL 1

An individual certified to AINDT Level 1 has demonstrated competence to carry out NDT according to written instructions and under the supervision of Level 2 or Level 3 personnel. Within the scope of the competence defined on the AINDT certificate, Level 1 personnel may be authorised by the employer to perform the following in accordance with NDT instructions:

- Set up NDT equipment
- Perform the tests
- Record and classify the results of the tests according to written criteria
- Report the results.

AINDT certified Level 1 technicians shall neither be responsible for the choice of test method or technique to be used, nor for the interpretation of test results.

2.2 **LEVEL 2**

An individual certified to AINDT Level 2 has demonstrated competence to perform NDT according to NDT procedures. Within the scope of the competence defined on the AINDT certificate, Level 2 personnel may be authorised by the employer to:

- Select the NDT technique for the testing method to be used
- Define the limitations of application of the testing method
- Translate NDT codes, standards, specifications, and procedures into NDT instructions adapted to the actual working conditions
- Set up and verify equipment settings
- Perform and supervise tests
- Interpret and evaluate results according to applicable standards, codes, specifications or procedures
- Carry out and supervise all tasks at or below Level 2
- Provide guidance for personnel at or below Level 2
- Report the results of NDT.

Australian Institute for Non-destructive Testing



PO Box 52, Parkville, Victoria 3052 Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

2.3 **LEVEL 3**

An individual certified to AINDT Level 3 has demonstrated competence to perform and direct NDT operations for which they are certified. AINDT certified Level 3 personnel have demonstrated:

- The competence to evaluate and interpret results in terms of existing standards, codes, and specifications
- Sufficient practical knowledge of applicable materials, fabrication, process, and product technology to select NDT methods, establish NDT techniques, and assist in establishing acceptance criteria where none are otherwise available
- A general familiarity with other NDT methods.

Within the scope of the competence defined on the AINDT certificate, AINDT certified Level 3 personnel may be authorised to:

- Assume full responsibility for a test facility or examination centre and staff
- Establish, review for editorial and technical correctness, and validate NDT instructions and procedures
- Interpret standards, codes, specifications, and procedures
- Designate the particular test methods, procedures, and NDT instructions to be used
- Carry out and supervise all tasks at all levels
- Provide guidance for NDT personnel at all levels.



Phone: (03) 9486 9267 Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3 QUALIFICATION AND CERTIFICATION

3.1 NDT CERTIFICATIONS AVAILABLE

Visual/Optical Testing			
Level	Sector	Technique/Endorsements	Designator
2	NA III C) (TON 4C

2	Multi Sector	VT2MS
3	Multi Sector	VT3MS
Liquid Penetrant		

Liquiu r elleti allit			
Level	Sector	Technique/Endorsements	Designator
1	General Engineering		PT1GE
2	Multi Sector	Welds, Castings, Forgings, In-Service	PT2MS
3	Multi Sector	Welds, Castings, Forgings, In-Service	PT3MS

iviagnetic raiticle			
Level	Sector	Technique/Endorsements	Designator
1	General Engineering		MT1GE
2	Multi Sector	Welds, Castings, Forgings, In-Service	MT2MS
3	Multi Sector	Welds, Castings, Forgings, In-Service	MT3MS

		, 0, 00,			
adiography	diography				
Level	Sector	Technique/Endorsements	Designator		
2	Welds	Film – Capture and Interpretation	RT2W (C&I)		
2	Welds	CR/DR - Capture and Interpretation	RT2W,CR/DR (C&I)		
2	Castings	Film	RT2C		
2	Castings	CR/DR	RT2C,CR/DR		
3	Welds	Film	RT3W		
3	Welds	CR/DR	RT3W,CR/DR		
2	Profile	CR/DR	RT2 PR CR/DR C&I		

Eddy Current			
Level	Sector	Technique/Endorsements	Designator
1	General Engineering		ET1G
2	Multi Sector		ET2MS
3	Multi Sector		ET3MS

rasonics			
Level	Sector	Technique/Endorsements	Designator
1	General Engineering		UT1GE
2	Welds	Pipe Plate Tee	UT2W
2	Welds	Nozzles	UT2W,Nozz
2	Welds	Nodes	UT2W,Node
2	Castings		UT2C
2	Forgings		UT2F
2	Corrosion	Corrosion Detection and Mapping	UT2CDM
3	Welds	Pipe Plate Tee	UT3W
3	Welds	Nozzles	UT3W,Nozz
3	Welds	Nodes	UT3W,Node
3	Castings		UT3C
3	Forgings		LIT3F

Phased Array Ultrasonics							
Level	Sector	Technique/Endorsements	Designator				
2	Multi Sector		PAUT2MS				
3	Multi Sector		PAUT3MS				

Time of Flight Diffraction Ultrasonics						
Level	Sector	Technique/Endorsements	Designator			
2	Welds		TOFD2W			
3	Welds		TOFD3W			

Australian Institute for Non-destructive Testing



PO Box 52, Parkville, Victoria 3052

Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

Note 1: Candidates wishing to apply for level 3 certification must have appropriate training and experience and would normally be expected to have held level 2 certification, in the specific method, for at least 12 months before being accepted to apply for level 3 certification.

Note 2: The abbreviation "C&I" was added in March 2017, to more clearly identify the scope of certification. All Certificates issued prior to March 2017 identified as Welds Sector, include the Capture and Interpretation scope.

3.2 LIMITED NDT QUALIFICATION UNDER ISO 20807

The AINDT offers certificates for limited qualification under ISO 20807 to persons who perform NDT applications of a limited, repetitive or automated nature in the following applications:

Method Abbi

Tank bottom testing TBT (incorporating magnetic flux leakage testing)

3.3 HEAT TREATMENT CERTIFICATION

The AINDT offers an in-house qualification/certification for heat treatment of welds in steel using electrical resistance equipment based on the requirements of ISO20807. The minimum theoretical training and required competence has been provided by industry and documented in AINDT document HT-01. This document identifies the purpose of this scheme, its administration, structure and assessment criteria and is only being offered via AINDT AQB's. For advice on which AQB's are offering this service please refer to the AINDT web site or contact the federal office.

3.4 CERTIFICATION REQUIREMENTS

The basic requirements for NDT certification, as specified in ISO 9712 and ISO 20807 are:-

- a) Satisfactory vision.
- b) Adequate training.
- c) Adequate experience.
- d) Satisfactory performance in written and practical examinations.

For persons meeting the requirements of (a), (b), and (d) above, but lacking experience, the Board offers Trainee status

Additionally, applicants must provide a passport size and quality photograph with applications for initial, renewal and recertification. The photograph can be provided electronically and uploaded via the AINDT portal.



PO Box 52, Parkville, Victoria 3052 Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.5 **VISION REQUIREMENTS**

For all levels of certification, the applicant is required to produce documented evidence from an optometrist, or other competent person, of compliance with ISO9712 and ISO 20807 namely:

- Near vision acuity shall be verified to be in accordance with the requirements of ISO 18490
- Near vision acuity to permit the reading of minimum of Times Roman N4.5 or equivalent size letters at a distance of not less than 300 mm with at least one eye, either uncorrected or corrected.
- Colour vision shall be sufficient that the candidate can distinguish and differentiate between the colours or shades of grey used in the NDT method, as specified by the employer.

Alternative vision test methods, no less stringent than the above, may be acceptable to the AINDT provided a formal written test procedure is submitted with the application.

Note: Company in-house vision test certificates will be accepted by AINDT once the company test procedure has been provided to the CB for review and approval. This procedure must identify the company officer(s) responsible for the vision testing scheme and all in-house certificates must be signed by a responsible officer.

Subsequent to certification, visual acuity shall be tested annually. The responsibility for this rests with the certified person and/or employer.

3.6 **NDT TRAINING**

and

The applicant shall have successfully completed an approved program of training in the relevant NDT Method and Product/Industry Sector in accordance with the requirements of ISO 9712 or ISO 20807, and/or complying with the published national training modules for the particular NDT method and product/industry sector. The applicant is required to produce validated evidence of completing and reaching an acceptable level of comprehension for the required training.

The use of a logbook would assist applicants to maintain detailed records of their training.

The training requirements for the relevant methods and levels of certification are given in ISO 9712 or ISO 20807 and are summarised in section 3.8 to 3.11.

The Board may recognise training by public and private training providers who train in accordance with approved national NDT training modules or AINDT approved training module descriptors (syllabi as listed in this guide) that comply with the training syllabi and training hours specified in ISO 9712 ISO 20807.

The AINDT also recognises that formal training courses provided by technical colleges and AQB's in some capital cities are not always accessible to many candidates. The AINDT will accept company "in house" training provided the training scheme is fully documented and submitted to the CB for review and acceptance. In such cases the company is expected to have appropriate equipment available for training purposes and to provide information on study time/hours, course notes used, syllabus followed, textbooks used and other relevant information. The company must also provide an examination at the completion of the training to demonstrate the candidate has achieved an acceptable level of comprehension (70% or greater pass mark would be considered acceptable). The company will provide each candidate who has successfully completed the training an in-house certificate of training signed by the officer responsible for the training scheme

The possible reductions in training duration are as described hereafter, provided that, when several reductions are applicable, the total reduction does not exceed 50 % of the training duration. Any reduction requires acceptance by the AINDT.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

For all levels:

- For candidates seeking certification in more than one method (e.g. MT, PT), or for those already certified and seeking certification in another method, when the training syllabus concerned duplicates certain aspects (e.g. product technology), the total number of training hours for these methods (e.g. PT, MT, VT) may be reduced in line with the training syllabus;
- For candidates who have graduated in a relevant subject from technical college or university, or have completed at least two years of relevant engineering or science study at college or university, the total required number of training hours may be reduced by up to 50 %.

Note: The college or university study must be relevant to the NDT method (chemistry, mathematics or physics) and/or to the product or industry sector (chemistry, metallurgy, engineering, etc.).

3.7 INDUSTRIAL NDT EXPERIENCE

3.7.1 Level 1 and Level 2

The applicant is required to have had a period of experience relevant to the certification sought in addition to any experience gained during training courses, such as practical training time. The applicant is required to produce evidence of experience and to complete the "Record of NDT Experience" on the application form. The experience requirements for the relevant methods and levels of certification are given in ISO 9712 or ISO 20807 and are summarised in section 3.8 to 3.11.

3.7.2 Level 3

Level 3 responsibilities require knowledge beyond the technical scope of any specific NDT method. This broad knowledge may be acquired through a variety of combinations of education, training and experience. The table below details minimum experience for candidates who have successfully completed a technical school or at least two years of engineering or science study at an accredited college or university. If this is not the case, the duration has to be multiplied by a factor of 2.

3.7.3 Possible reductions

The possible reductions in duration of experience are as described hereafter, provided that, when several reductions are applicable, the total reduction does not exceed 50 % of the experience duration. Any reduction shall require acceptance by the AINDT

Experience reduction due to Qualification/Education

For **Level 2 certification**, work experience consists of time as a Level 1 & Level 2. If the individual is being qualified directly to Level 2, with no time at Level 1, the experience shall consist of the sum of the times required for Level 1 and Level 2. No reduction in the period of experience based on educational attainment shall be allowed. The level and quality of education possessed by the candidate should also be considered. This is particularly the case for the Level 3 candidate but it can also be applicable for other levels.

Additional Methods

A certified Level 1, 2 or 3 adding an additional method may be permitted a reduction of required experience of 25 % for that additional method.

Changing Adding Sector

A certified Level 1, 2 or 3 individual changing sector, adding another sector or technique for the same NDT method shall be required to gain additional experience of at least 25 % of the experience required in Table 3; and this shall never be less than 15 days (105 hours) in duration.

Australian Institute for Non-destructive Testing



PO Box 52, Parkville, Victoria 3052

Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

Structured Experience Program

Up to 50 % of the industrial experience time may be achieved by a structured experience program (SEP). One day of attendance at the SEP may be equivalent to a maximum of five days industrial experience. The SEP shall include all typical tasks of the level, method and sector concerned. The additional intent is to gain specific product and technique knowledge. The SEP shall be **approved in advance** by the certification body and shall be available for audit by the certification body.

Limited Application

When the certification sought is limited in application (e.g. thickness measurement or automated testing), experience duration may be reduced by up to 50 % but shall not be less 15 days (105 hours) in duration.

Additional Requirements Radiography

In addition to the above requirement for experience hours, candidates seeking RT2 & RT3 certification will be required to show evidence of having viewed and assessed a minimum of 1000 radiographs/images for each sector/endorsement sought.

3.7.4 Referee Suitability

For initial certification, referees must be in a position to direct and control the activities of the candidate. Colleagues and acquaintances would not typically meet this requirement and may as such, be rejected as a suitable referee. ISO9712 allows for candidates to gain experience under the supervision of NDT personnel certified in the same method or by non-certified personnel who, in the opinion of the certification body, possess the knowledge, skill, training, and experience required to properly perform such supervision.

For renewal and recertification applications, the chosen referee need not meet the requirements for initial certification in terms of being in a position to direct and control the activities of the candidate, but must still show evidence of necessary knowledge, skill, training, and experience required to attest that the candidate has satisfactorily carried out the stated range of NDT activities.

For any type of certification, referees not holding appropriate ISO9712 certification must supply evidence of knowledge, skill, training, and experience commensurate with the nature of the supplied referee statement, as described above. Where extenuating circumstances exist, the candidate may request in writing special consideration from the Certification Board.

A pre-approval process for referees is available, and recommended for use by candidates whose referee does not hold recognised certifications. Refer to the download section of AINDT.COM.AU.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.8 MINIMUM NDT TRAINING & EXPERIENCE (CUMULATIVE TOTALS) – ISO 9712

NDT Method	NDT Method Level 1			rel 2	Level 3		
	Training (Hour)	Experience (Hours)	Training (Hours)	Experience (Hours)	Training (Hours)	Experience (Hours)	
Eddy Current Testing	35	315	77	1260	119	3150	
Magnetic Particle Testing	21	105	35	420	63	1260	
Penetrant Testing	21	105	35	420	56	1260	
Radiographic Testing	Not A	/ailable	105	1260	140	3150	
Computerised/Digital Radiography	Not Available		35	840	56	1680	
Ultrasonic Testing	56	315	126	1260	161	3150	
Phased Array (PAUT)	Not Available		70	840	91	1680	
TOFD	Not Av	ailable	70	840	91	1680	
Visual	Not Available		35	420	56	1260	

When an individual is working in excess of 40 h/week, they may be credited with experience based on the total hours, but they shall be required to produce evidence of this experience.

- Note 1: Training and experience requirements for Level 2 include training and experience at Level 1.
- **Note 2:** Persons seeking direct access to Level 2 must complete the Level 2 training and experience as shown in the table.
- Note 3: Training and experience at level 3 includes hours at Level 2.
- **Note 4:** The prerequisite for Ultrasonic Testing Phased Array or Ultrasonic Testing TOFD Level 2 is ISO9712 Ultrasonic Testing Level 2 Welds certification (Pipe, Plate & Tee). The prerequisite for Ultrasonic Testing Phased Array or Ultrasonic Testing TOFD Level 3 is Ultrasonic Testing Level 3 Welds ISO9712 certification (Pipe, Plate & Tee).
- **Note 5:** Ultrasonics Level 2 CDM is offered as a limited certification as per AS/ISO 9712 certification. Minimum total Training Hours 80, Minimum Experience 9 Months (1260 hours)
- Note 6:The prerequisite for Radiography Level 2 is completion of a minimum of 40hrs of Radiography and Radiation Safety Training aligned with National Module EA612 or equivalent.

 The possession of a State/Territory Radiation Use License, <u>does not</u> automatically exempt candidates from this requirement, due to the variable state/territory minimum training requirements.
- **Note 7:** The prerequisite for RT2 CR/DR is Radiography Level 2 Welds ISO9712 certification. The prerequisite for RT3 CR/DR is Radiography Level 3 Welds ISO9712 certification.
- **Note 8:** Candidates attempting RT 2 Profile CR/DR who already hold ISO 9712 RT2 W (CR/DR) certification may be credited with 16 hrs of training, requiring them to complete a minimum of 24 hrs of formal training for this endorsement. This credit is at the discretion of the AQB and may not be credited on grounds of



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

practicality and safety.

3.9 MINIMUM TRAINING & EXPERIENCE FOR LIMITED APPLICATION –ISO 20807

NDT Application	Training	Experience
Tank Bottom Testing (TBT)	40 hours	160 hours

3.10 PRE-REQUISITES FOR LIMITED APPLICATION QUALIFICATIONS TO ISO 20807

3.10.1 Tank Bottom Testing (TBT)

The applicant must have current ISO9712 certification for Ultrasonic Testing Level 2.

This requirement is to ensure the operator of TBT equipment is also capable of proving up MFL indications produced from the test.

3.11 MINIMUM TRAINING & EXPERIENCE – HEAT TREATMENT – AINDT HT-01

NDT Application	Training	Experience
Heat Treatment of Welds in Steel Using Electrical Resistance Equipment	40 hours	160 hours

Note: Applicants must provide a certificate of training from an AQB and a declaration from their employer attesting to the minimum experience required, to be considered for certification.

3.12 TRAINEE

An applicant who lacks the minimum experience requirement but has received the relevant training and has demonstrated competence by a pass in the prescribed examinations, may request to be granted "Trainee" status and have certification deferred. Once the AINDT has received evidence from the applicant of additional experience and the minimum number of hours has been satisfied, trainee status will be upgraded to full certification with an expiry date 5 years from the date they completed the practical examination.

Note: It is the responsibility of a trainee to inform the AINDT of experience gained whilst holding that status.

Trainee status is valid for five (5) years from the date of success in the practical examination. Applicants who require more than two (2) years to accumulate the required experience hours will have to demonstrate to the applications committee they have not had a significant interruption, i.e. a period of twelve (12) months or more where they have not used that method, otherwise a re-sit of the practical will be required. If after five (5) years the trainee has not finalised their certification, the application will lapse and they must apply for certification as a new applicant.

3.13 NDT MODULE DESCRIPTORS

Module Descriptors (syllabi) for NDT examinations are available on request from the AINDT Certification Board Secretariat or they can be downloaded from the Institute's web site – www.aindt.com.au.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.14 ARRANGEMENTS FOR NDT EXAMINATIONS

Only applicants who have met the specified minimum requirements for approved training are eligible to sit examinations.

In addition to the 6 monthly exams in Brisbane and Sydney Authorised Qualifying Bodies (AQB's) offer AINDT examinations at other times following on their training courses held in these locations. Details of their programs can be obtained from the various AQB's as listed on the Institute's web site. AINDT presently conducts examinations in Brisbane and Sydney in July and November each year. Examinations in Perth, Adelaide and Melbourne are now only available via the AQB's operating in these cities and can be accessed at the end of their training courses which occur regularly throughout the year, contact an AQB for specific details. The closing date for the AINDT examinations is six (6) weeks prior to the examination week. These examinations are at Approved Examination Centres (refer to the AINDT website for list of AECs). Examination dates and examination closing dates are available from the AINDT Certification Administrator, from AINDT Branch Secretaries and are published in the Institute's Journal and on the Institute's web site.

Note: Examinations for Ultrasonic Testing – PA, TOFD, CR, DR, Eddy Current and Heat Treatment of Welds in Steel Using Electrical Resistance Equipment can only be done via an AQB. Persons wishing to acquire either of these certifications should refer to the AINDT web site or contact the federal office for advice on AQB's offering this service.

Practical examinations are normally held in conjunction with the written examinations but may (due to availability of test pieces and test equipment) require special arrangements. Applicants for **Radiographic Testing** should note that they are required to produce radiographs as part of the practical examination. Furthermore, applicants for **Radiographic Testing** may be required by their state radiation health authority to carry a licence and a personal radiation monitoring device at the examination centre.

Persons certificated to Level 2 or Level 3 in ultrasonic testing (UT) may obtain endorsements to the certification for complex geometries of **nozzle joints and node joints**. Nozzle endorsement is a prerequisite for node endorsement. Persons seeking these endorsements must make application using the Application for Endorsement form and pass a practical examination (including a work instruction) for UT of the applicable geometry. The Application for Endorsement form is available from the AINDT web site or by contacting the Certification Administrator.

In the case of a certificated level 2 or Level 3 person achieving nozzle or node endorsement, the candidate's certificate is re-dated to an issue 1 from the time of the endorsement.

Note: Radiographic practical examination candidates may need to arrange a suitable AEC facility or their employer's premises using their equipment, to undertake the practical test. This may be necessary due to regulatory and/or OH&S issues affecting the AEC site

3.15 UNSCHEDULED EXAMINATIONS

Unscheduled examinations can be arranged for groups of applicants subject to a minimum charge dependent on costs to provide the service. It should be noted that the AINDT, sometime in the future, intends to only offer examinations through AQBs. Ample notice will be provided to potential candidates before this process is implemented.

The conditions for these examinations are available on request from the CSD.



PO Box 52, Parkville, Victoria 3052 Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.16 RE-SIT EXAMINATIONS

An initial candidate who fails to obtain the pass grade for any examination section, may seek re-examination up to two times in the failed sections, provided that the re-examination takes place not sooner than one month, unless further training acceptable to the certification body is satisfactorily completed, nor later than two years after the original examination. Applicants who fail the second re-sit examination shall be required to sit all examinations as for a new candidate.

Applicants who fail examinations should download an *Application to Resit* form from the AINDT web site. This form must be completed and returned with the appropriate payment before the applicant can resit the failed examination(s). Payment comprises the appropriate Examination fee(s) and is provided in the AINDT's Schedule of Fees, available from the AINDT web site or Secretariat. For resits taken at AINDT examination centres, resit applications must be received prior to the closing date for the particular examination session.

3.17 CERTIFICATION AND PERIOD OF VALIDITY

Successful applicants receive a certificate and an identification card.

Issue 1 Certifications are valid from the date of issue and up to five years from the date of successful completion of the practical exam.

Issue 2 Certifications are valid from the date of issue and up to five years from the date of successful renewal.

Recertification will be required after 10 years from the date the practical examination was successfully completed. To avoid penalising candidates who re-certify prior to expiry of their certificate, the recertification shall have a validity of five (5) years from expiry of current certification, up to a maximum of 6 months.

Example: A candidate's certification expires in January 2015. The candidate re-certifies in September 2014. The validity of the certificate will be dated from the initial expiry date of January 2015.

One passport photograph is required to be supplied by the applicant for entry to examinations and for use on the identification cards and for AINDT records.

3.18 RENEWAL OF CERTIFICATION

Prior to the completion of the first period of validity i.e. 5 years from the last successful full practical examination, certification may be renewed by the certification body for a new period of five years on production of:

- a) documentary evidence of a satisfactory near vision acuity examination taken within the preceding 12 months; and
- b) documentary evidence of a satisfactory colour vision and/or grey scale perception examination taken within the preceding 60 months; and
- c) verifiable documentary evidence of continued satisfactory work activity (a minimum of 50 hrs per year in the method) without significant interruption in the method and sector for which certificate renewal is sought;

and either:

- d) successful completion of a practical examination element in accordance with Section 5 except that it shall consist of a minimum of 50 % of the examination specimens required by Section 5; or
- e) successfully meeting the requirements of the structured credit system as given in 13.19.5.

If the criterion c) for renewal is not met, the individual shall follow the same rules as for recertification.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.19 RECERTIFICATION

Prior to the expiry of the second 5 year period (i.e. 10 years from successful full practical examination), persons are required to recertify for a further period of five years.

3.19.1 ISO 9712 NDT All Levels

Certification may be recertified by the certification body for a new period of five years on production of:

- a) documentary evidence of a satisfactory near vision acuity examination taken within the preceding 12 months; and
- b) documentary evidence of a satisfactory colour vision and/or grey scale perception examination taken within the preceding 60 months; and
- c) verifiable documentary evidence of continued satisfactory work activity (a minimum of 50 hrs per year in the method) without significant interruption in the method and sector for which certificate renewal is sought; and
- d) the practical examination requirements of 3.19.2 or 3.19.3

3.19.2 ISO9712 Levels 1 & 2 Practical Examination

The individual shall successfully complete the full practical examination element as per Section 5.

If the individual fails to achieve a grade of at least 70 % for each specimen tested, and, for Level 2, for the instruction, two retests of the whole recertification examination shall be allowed after at least 7 days and within twelve (12) months of the first attempt at the recertification examination.

Applications for recertification may be conducted up to 6 months prior to the expiry date of the current certification. Expiry date of the recertificate will be 5 years from the expiry date of the renewal certification period.

Should the recertification formalities be completed after the expiry date of the existing certificate, the recertification certificate shall be issued on the date that the recertification formalities were completed.

In the event of failure in the two allowable re-examinations, the certificate shall be withdrawn. In order to reinstate certification, a candidate shall:

- complete further training, acceptable to the certification body via discussion with the AQB whom delivered the recertification examination. In such cases the candidate will apply to the Certification Board using the AINDT Special Consideration form for further guidance; and
- retake all examination elements required for initial certification.

The date of expiration of the reinstated certificate shall be no more than 5 years from the date of expiration of the original certificate.

In this case, no examination exemptions shall be awarded by virtue of any other valid certification held.

Australian Institute for Non-destructive Testing



PO Box 52, Parkville, Victoria 3052

Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.19.3 ISO 9712 NDT Level 3 recertification:

 a) satisfactory completion of the practical examination as required for level 2 and an examination paper consisting of a minimum 20 questions on the application of the test method in the sector(s) concerned (Main Method Examination Part E), demonstrating an understanding of current standards, codes or specifications and applied technology and 20 questions on the certification body's certification scheme (Basic Exam Part B),

or

b) satisfactory completion of a full practical examination as required for level 2 and meeting the requirements of a structured credit system as described in ISO9712 Annex C as presented below.

If the credit system is chosen and requires submission of employer's documents or access to an employer's premises, the individual shall provide to AINDT a written statement of approval from the employer.

Where a certificate holder elects to use the structured credit system, they shall provide evidence to the certification body to demonstrate achievement of a minimum of 100 points in the 5 year recertification period based on the requirements of Table C.1.

For certificate holders seeking recertification of Level 3 certification:

- a minimum of 50 and a maximum of 70 of the 100 points is required for any combination of activities listed in item A of Table C.1; and
- a minimum of 30 and a maximum of 50 of the 100 points is required for any combination of activities listed in item B of Table C.1.

If the individual fails to achieve a grade of at least 70 % in the recertification examination, a maximum of two retests of the recertification examination shall be allowed. The time period within which all tests are to be taken shall be 12 months, unless otherwise extended by the certification board.

In the event of failure in the two allowable retests, the certificate shall not be revalidated and, to regain certification for that sector and method the candidate shall be required to achieve success in the appropriate main method examination.

3.19.4 Other

For heat treatment to AINDT HT-01 recertification will be achieved by completing a practical examination (which includes the competencies covered by HT-01) with a pass mark of 80%.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.19.5 Structured Credit System

Renewal

Where a candidate elects to use the structured credit system, they shall provide evidence to the certification body to demonstrate achievement of a minimum of 100 points in the 5-year renewal period based on the requirements of Table C.1.

Level 1

- a minimum of 75 of the 100 points is required for any combination of activities listed in part A of Table C.1.

Level 2 or 3

- a minimum of 50 of the 100 points is required for any combination of activities listed in part A of Table C.1.

Recertification:

Level 3 certification:

- a minimum of 50 and a maximum of 70 of the 100 points is required for any combination of activities listed in item A of Table C.1; and
- a minimum of 30 and a maximum of 50 of the 100 points is required for any combination of activities listed in item B of Table C.1.

Evidence

In order to assess the activities specified in the structured credit system, the certification body may request from the individual seeking renewal or recertification documentation and/or evidence to demonstrate compliance including, but not limited to, the following:

- a) confirmation of the candidates work activities by a certified individual or referee;
- b) confirmation of the level of activity of the individual in the given method;
- c) confirmation of formal documented competency or proficiency test(s) in the given method;
- d) dates and protocol numbers of reports;
- e) details of any job specific training received;
- f) confirmation of employer's authorization to operate;
- g) summary of activities and outputs;
- h) job/position description;
- i) annual/regular employer assessments of performance/competence;
- j) sample NDT reports;
- k) sample procedure(s) developed (Level 3 only);
- I) customer feedback;
- m) confirmation of adherence to code of ethics from employer;
- n) confirmation of compliance with additional national requirements (i.e. radiation safety).
 - Other evidence may be deemed acceptable or be requested by the certification body. The certification body may require that some or all of the submitted evidence be confirmed by the employer.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

Table C.1 — Structured credit system for renewal Level 1, 2 and 3 and for Level 3 recertification a

			Level 1			Level 2			Level 3	
Item	Activity	Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity	Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity	Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity
1	Part A									
1	Performance of NDT Activities a	2 / day	25	95	2 / day	25	95	2 / day	25	95
2	Completion of theoretical training in the method	1 / day	5	15	1 / day	5	15	1 / day	5	15
3	Completion of practical training in the method	2 / day	10	25	2 / day	10	25	2 / day	10	25
4	Delivery of practical or theo- retical training in NDT in the method considered	N/A	N/A	N/A	1 / day	15	75	1 / day	15	75
5	Participation in research activi- ties in NDT field or for engineer- ing of NDT (see <u>Annex E</u>)	1 / week	15	60	1 / week	15	60	1 / week	15	60
	Part B									
6	Participation to a technical seminar/paper in the field of the method or technique	1 / day	2	10	1 / day	2	10	1 / day	2	10
7	Presenting a technical seminar/ paper in the field of the method or technique	1 / presenta- tion	3	15	1 / presenta- tion	3	15	1 / presenta- tion	3	15
8	Current individual membership in NDT or NDT related society	1 / member- ship	2	5	1 / member- ship	2	5	1 / member- ship	2	5
9	Technical oversight and mentor- ing of NDT personnel/trainee in the relevant method	N/A	N/A	N/A	2 / mentee	10	30	2 / mentee	10	40
10	Participation or convenorship in standardization and technical committees	N/A	N/A	N/A	1 / commit- tee	3	15	1 / commit- tee	4	20

NOTE Where the term "year(s)" is noted in this table, this is specified as a certification year and not as a calendar year.

Table C.1 (continued)

			Level 1			Level 2			Level 3	
Item	Activity	Points granted per activity	Maximum number of points per year of activity		Points granted per activity	Maximum number of points per year of activity		Points granted per activity	Maximum number of points per year of activity	THE PERSON NAMED IN COLUMN
11	Performing a technical NDT role within a certification body	N/A	N/A	N/A	2 / activity	10	30	2 / activity	10	40

NOTE Where the term "year(s)" is noted in this table, this is specified as a certification year and not as a calendar year.

See <u>C.2</u> for specific details of this activity.

See <u>C.2</u> for specific details of this activity.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

3.19.6 Lapsed Qualifications/Certifications

All effort will be made by AINDT to give adequate forewarning that a certificate is due to expire. **The onus of maintaining certification belongs to the person identified on the certificate**, who should begin renewal or recertification procedures at a suitable time before expiry.

Note: The authority to operate is given by the employer, and if a certificate expires then the employer may disallow continued employment. If an operator continues to work with an invalid certificate without informing his employer or client, then all responsibility remains with the operator.

If renewal is applied for after expiry and up to 12 months from this date then a late renewal fee shall apply. If the operator fails to renew after 12 months then the certificate shall lapse and can only be regained by meeting the requirements for initial certification examination.

If recertification is applied for after expiry and up to 12 months from this date then a late renewal fee shall apply. If recertification is applied for more than 12 months after expiry (i.e. lapsed), then it can only be regained by applying for certification as an initial certification examination.

Note: Renewal or recertification issued after expiry but before lapsing will commence from the date of approval only, resulting in a certification period that is less than, but not exceeding the 5 or 10 year total allowed by the standard.

3.20 EXAMINATION ONLY (AEROSPACE)

Persons seeking aerospace Registration under ISO9712 or other standards who wish to sit for one or more AINDT L3 Examinations without applying for certification, may do so by:-

- Completing an "Application for Examination(s)" form, available from the AINDT Certification Administrator
 or from the Institute's web site.
- Paying the appropriate examination fee plus an administration fee. Information on these fees is published
 in the AINDT's "Schedule of Fees NDT". Applicants should ensure they have a current version of the
 Schedule of Fees.
- Enclosing one passport photograph for identification purposes at the examination.

Applicants should note that completing the main method examination successfully does not qualify them for any form of AINDT Certification. No certificate will be issued to these applicants. However these persons will be granted exemption from the Main Method Examination in any future application for certification in accordance with ISO 9712.

3.21 RECERTIFICATION FROM AS 3998/ISO 9712 MT / PT WELDS TO MULTISECTOR

Persons holding existing Level 2 or 3 AINDT Certification in MT welds or PT welds and seeking recertification, the requirement is to recertify to multi-sector and are required to perform the multi-sector practical examinations. The upgrade to multi-sector is required due to welds sector no longer being available.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

4 FEES

4.1 APPLICATION FORMS

All applications are to be made via the AINDT portal. A link to the portal can be found on the Institute's web site – https://portal.cbdb.aindt.org/login.php

It should be noted that all applications must be accompanied by all relevant information and the application and examination fees as listed in the "Schedule of Fees – NDT" (latest edition).

Note: Incomplete applications will not be processed.

4.2 APPLICATION FEES

An application for certification fee is payable with **every** application to offset administration costs, certificate and I.D. card production.

Current application fees are published in the AINDT "Schedule of Fees – NDT" and are available from the AINDT website www.aindt.com.au. Applicants should ensure that they have the latest up-to-date schedule of fees for the current year before submitting their Application.

An application is valid for a period of two years. After that time the application will be considered to have lapsed. Extensions to the two year validity period may be considered in special circumstances.

4.3 EXAMINATION FEES

An examination fee is payable for every examination to offset preparation, marking, test piece freight and exam supervision costs.

Current examination fees are published in the "Schedule of Fees – NDT". Applicants should ensure that they have the latest up-to-date schedule for the current year before submitting their application.

4.4 RENEWAL / RECERTIFICATION FEES

Current renewal and recertification fees are published in the "Schedule of Fees - NDT". Applicants should ensure that they have the latest up-to-date schedule for the current year before submitting their application for renewal or recertification.

- **Note 1:** For renewal of certification, the renewal fee only is payable. An "Application for Renewal" form must be completed.
- **Note 2:** For recertification, i.e. on expiry of an issue 2 certificate, the recertification including the practical examination fees are payable. The "Application for Re-certification" form must be completed.
- **Note 3:** If practical examinations are completed through an AQB then only the recertification fee (without practical examination) is payable to AINDT.
- **Note 4:** Level 3 recertification can be achieved by either undertaking a practical and written examination, or through a credit point system which includes a practical examination, in accordance with ISO9712 annex C.

4.5 NON-ATTENDANCE AT EXAMINATIONS

Applicants applying for an examination may request, in writing, a deferral of the examination up to 30 days before the examination date.

Where no deferral is requested and the applicant fails to sit the examination as planned, that part or the entire examination fee shall be forfeited, as detailed in Clause 3.8 and the application will lapse.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

4.6 CODE OF ETHICS

All applicants for NDT examinations are required to agree to be bound by the AINDT Code of Ethics and Regulations for Use of Certificates and Logos/Marks a copy of which is provided with the Board's "Application for Certification" forms. The Code of Ethics is found on www.aindt.com.au

4.7 REPLACEMENT CERTIFICATES AND ID CARDS FEES

Persons requiring replacement of lost Certificates or I.D. cards should make application to the Certification Administrator using the "Application for Replacement Certificate/ID Card" that is available on the AINDT web site. Fees for the issue of replacement Certificates and I.D. Cards are published in the "Schedule of Fees – NDT".

4.8 REFUND POLICY

In addition to the above fee structure, AINDT has a refund policy for cancellations and deferrals:

4.8.1 Cancellation

Application Fee: for initial certification, renewal or recertification Non-refundable

Application for Examination Fees: Cancelled prior to 2 weeks before the examination date 50% refundable

Application for Examination Fees: Cancelled less than 2 weeks before the examination date **Non-refundable**

4.8.2 Notified Deferral

Application for Examination Fees: Notified prior to 30 days before the examination date **Credited to next exam date.**

Note: If the applicant fails to notify deferral, clause 4.8.1 applies



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

5 NDT EXAMINATIONS

For specific details of some examinations, refer to Annex A.

5.1 REQUIREMENTS FOR ISO 9712 - LEVEL 1

Examination requirements for Level 1 certification comprise:

- General Examination
- Specific Examination
- Practical Examination

5.1.1 General Examination Level 1

This examination tests the applicant's knowledge of the theory and general applications of the particular NDT method. This paper consists of multiple choice questions to be answered on the examination paper.

All Methods: 40 questions minimum

Duration: 2 minutes per question

Pass Mark: 70%

5.1.2 Specific Examination Level 1

This examination tests the applicant's knowledge of the Industrial Sector and the application of the NDT method to the specific field of non-destructive testing (product sector). The paper consists of multiple choice and/or short answer questions to be answered on the examination paper.

UT/RT/ET/MT/PT/VT: 20 questions minimum for single sector, 30 questions minimum for multiple sectors

Duration: 3 minutes per question

Pass Mark: 70%

5.1.3 Practical Examination Level 1

This examination requires the practical application of the NDT method to the Industry Sector for which application is made. The Practical Examination may include any or all (but is not limited to) of the following requirements:

- Detailed description and illustration of the equipment set-up and/or test procedure and test parameters for a particular application.
- The recognition and identification of discontinuities as shown by the test and which includes general knowledge of the mechanism giving rise to the discontinuities.
- Accurate reporting concerning geometry, location and sizing revealed by the test procedure.



PO Box 52, Parkville, Victoria 3052 Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

5.1.4 Practical Examination Duration and Assessment:

UT/MT/PT/VT: 3 hours maximum

A minimum pass mark of 70% is required in each specimen and section.

Applicants who fail to report discontinuities nominated for mandatory detection will not be granted a pass in the practical examination.

Applicants who report excessive false calls (reporting of non-existent discontinuities) will not be granted a pass in the practical examination.

Applicants who fail to comply with specific code compliance areas will not be granted a pass in the practical examination. Examples include failure to comply with:

- Minimum reporting requirements (all methods)
- Scanning techniques and coverage (UT)

A person failing practical examination of a particular section need only re-sit examination of that failed section.

5.2 REQUIREMENTS FOR ISO 9712 - LEVEL 2

Examination requirements for Level 2 certification comprise:

- General Examination
- Specific Examination
- Practical Examination

5.2.1 General Examination Level 2

This examination tests the applicant's knowledge of the theory and general applications of the particular NDT method. This paper consists of multiple choice and/or short answer questions to be answered on the examination paper. There is no general examination for PAUT and ToFD as the general paper is covered under the pre-requisite UT2W certification.

All Methods: 40 questions minimum

Duration: 2 minutes per question

Pass Mark: 70%

5.2.2 Specific Examination Level 2

This examination tests the applicant's knowledge of the Industrial Sector and the application of the NDT method to the specific field of non-destructive testing (product sector). The paper consists of multiple choice and/or short answer questions to be answered on the examination paper.

UT/RT/ET/MT/PT/VT: 20 questions minimum for single sector, 30 questions minimum for multiple sectors

Duration: 3 minutes per question

Pass Mark: 70%



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

5.2.3 Practical Examination Level 2

This examination requires the practical application of the NDT method to the Industry Sector for which application is made. The Practical Examination may include any or all (but is not limited to) of the following requirements:

- Detailed description and illustration of the equipment set-up and/or test procedure and test parameters for a particular application.
- Interpretation of radiographs, where applicable.
- The recognition and identification of discontinuities as shown by the test and which includes general knowledge of the mechanism giving rise to the discontinuities.
- Accurate reporting concerning geometry, location and sizing revealed by the test procedure.
- Writing of an instruction in the NDT method and product/industry sector for a Level 1 operator.

The minimum pass mark for the practical part is 70% in each specimen tested, image interpreted and work instruction.

5.2.4 Practical Examination Duration and Assessment:

UT/RT/ET/: 5.5 hours maximum

MT/PT/VT: 3 hours maximum

Practical examinations are broken into sections.

Example: Radiography practical exam consists of 3 sections.

- a) Inspection and reporting of minimum 2 specimens
- b) Development of Work Instruction
- c) Interpretation of 12 Films

A minimum pass mark of 70% is required in each specimen and section.

Applicants who fail to report discontinuities nominated for mandatory detection will not be granted a pass in the practical examination.

Applicants who report excessive false calls (reporting of non-existent discontinuities) will not be granted a pass in the practical examination.

Applicants who fail to comply with specific code compliance areas will not be granted a pass in the practical examination. Examples include failure to comply with:

- Geometric Unsharpness (RT)
- Film density (RT)
- Minimum reporting requirements (all methods)
- Scanning techniques and coverage (UT)



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

A person failing practical examination of a particular section need only re-sit examination of that failed section.

Example: UT2 Welds Practical Exams

Section 1: Specimens

Specimen 1: 80% Specimen 2: 53% Specimen 3: 91%

Section 2: Work Instruction

Grade: 85%

Overall Result: Fail, as minimum of 70% in each specimen and section not achieved.

Resit Required:

Resit of Section 1: 3 Specimens required.

5.2.5 Advanced Techniques

The additional specific requirements for level 2 practical examination for the nominated advanced techniques are as follows:

5.2.5.1 Phased Array (PAUT) - Multisector

Exam Specimens: 1 off corroded specimen, 2 off welds

Encoded Phased Array Collection Corrosion

Assembly and calibration of Ultrasonic Phased Array equipment. Time allowed: Maximum 1 hour.

NOTE. The student will be required to carry out a full calibration without the use of previously saved setup files. If this part of the examination is satisfactory the candidate may proceed to the remainder, if not the examination will be discontinued.

Inspection of corrosion specimen.

The student will analyse the data on the instrument or on external device (laptop), and provide a report displaying the results in an indicated format, and showing the location and size of discontinuities present in the specimen. The report shall contain information such as characterisation, size and position from known datums. The report shall also contain, phased array images of all data collected and each discontinuity. Time allowed: Maximum 1 hour.

Australian Institute for Non-destructive Testing



PO Box 52, Parkville, Victoria 3052

Phone: (03) 9486 9267

 $Website: \underline{www.aindt.com.au} \quad Email: \underline{ndtcertification@aindt.com.au}$

Encoded Phased Array Collection Welds

Assembly and calibration of Ultrasonic Phased Array equipment.
 (Maximum 2 hours)

NOTE. The student will be required to carry out a full calibration without the use of previously saved setup files. If this part of the examination is satisfactory the candidate may proceed to the remainder, if not the examination will be discontinued.

Inspection of two off welded specimen as selected by the examiner

The student will analyse the data on the instrument or on external device (laptop), and provide a report displaying the results in an indicated format, and showing the location and size of discontinuities present in the specimen. The report shall contain information such as characterisation, size and position from known datums. The report shall also contain, phased array images of all data collected and each discontinuity.

(Maximum 1 hour each specimen.)

The minimum pass mark for the practical part is 70% overall, and 70% for each specimen tested.

5.2.5.2 ToFD

- Calibrate, test, collect, store and analyse test data for two linear weld specimens selected by the Examiner. Time allowed: 1.5 hrs per specimen.
- Interpret and report on three additional recorded weld scan data files representative of a range of TOFD examinations. Display the results in an indicated format, showing the location and size of flaws present in the weld. Time allowed: Maximum 1.5 hours.
- Prepare a detailed NDT instruction suitable for level 1 certificate holders to follow for testing of one linear butt weld specimen to a provided code, standard or specification. Time allowed: Maximum 1 hour.

5.2.5.3 Computed Radiography / Digital Radiography (CR/DR)

- The radiographic testing of 2 specimens, selected by the examiner as appropriate to the certification sought in accordance with instructions provided. Time allowed: Maximum 1.25 hours.
- Preparation of a detailed NDT Instruction to a provided code, specification or standard for one specimen.
 Time allowed: Maximum 1 hour.
- Viewing, interpreting and reporting on a total of 12 images representative of the categories of certification sought. Time allowed: Maximum 1 hour.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

5.2.6 Examination Exemptions – ISO 9712 - Level 1 and 2

Exemption from the Level 1 and 2 General Examination is available to:

- Applicants who have passed an equivalent examination in the relevant method, either conducted by AINDT or other ISO9712 certification body recognised by AINDT;
- Applicants who have passed the General Examination in a particular NDT method as part of a qualification for the particular product sector and are seeking certification in the same method in another product sector.

If applicant passes the Phased Array UT level 2 Practical Examination then success at the practical weld examination can be used as evidence for re-certification of the UT level 2 (welds) qualification. The clock is reset based on when the practical examination was sat.

If applicant passes the Radiography CR/DR UT level 2 then success at the practical weld examination can be used as evidence for re-certification of the Radiography Level 2 (welds) qualification. The clock is re-set based on when the practical examination was sat.

Applicants holding overseas certifications may also be eligible for exemptions. (Ref Overseas Qualifications Section 6.0)

Method/Sector	Level	Supplementary	Initial
UT Welds	2 & 3	Nodes	Weld
UT Welds	2 & 3	Nozzles	Welds
UT Welds	2 & 3	PAUT	Welds
RT Welds	2 & 3	CR/DR	Welds

Practical Exam Recertification Exemption Matrix

Example: Satisfactory completion of PAUT level 2 examination, can be used as evidence for UT2 Welds Recertification.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

5.3 REQUIREMENTS FOR ISO 9712 - LEVEL 3

All candidates for Level 3 certification in any NDT method shall have successfully completed (with a grade of ≥70 %) the practical examination for Level 2 in the relevant sector and method. This exemption is only valid for the product sectors covered by the industrial sector concerned and, in any other circumstances; the relevant sector is the sector in which the candidate seeks Level 3 certification. The relevant practical exam shall remain current at all times (at no times shall more than 10 years pass between successful completion of the practical exam).

AINDT does not require the Level 3 to hold both Level 2 and Level 3 certification once level 3 is achieved, provided the requirement for practical currency is maintained.

5.3.1 Basic Examination Level 3

This written examination shall assess the candidate's knowledge of the basic subjects using at least the number of multiple choice questions shown below.

Part	Subject	Number of questions
Α	Technical knowledge in materials science and process technology.	25
В	Knowledge of the certification body's qualification and certification system based on ISO 9712. This may be an open book examination.	20
С	General knowledge of at least four methods as required for Level 2 and chosen by the candidate from the methods given in Clause 1. These four methods shall include at least one volumetric method (UT or RT).	for each test method (total 60)

It is recommended that the basic examination be passed first and remain valid, provided that the first main method examination is passed within five years after passing the basic examination. A candidate holding a valid and recognized ISO9712 Level 3 certificate is exempt from the need to retake the basic examination.

Duration: Parts A & C, two minutes per question.

Part B, three minutes per question.

Pass Mark: 70% in EACH of the above three (3) parts

5.3.2 Main Method Examination Level 3

This examination will test the applicant's in-depth knowledge of the theory and general applications of the particular NDT method in the product/industry sector.

The applicant will also be required to draft one or more NDT test procedures in the relevant product/industry sector.

Part	Subject	Number of questions
D	Level 3 knowledge relating to the test method applied.	30
E	Application of the NDT method in the sector concerned, including the applicable codes, standards, specifications and procedures. This may be an open book examination in relation to codes, standards, specifications and procedures.	20
F	Drafting of one or more NDT procedures in the relevant sector. The applicable codes, standards, specifications and other procedures shall be available to the candidate. For a candidate who has already drafted a NDT procedure in a successfully passed Level 3 examination, the certification body may replace the drafting of a procedure with the critical analysis of an existing NDT procedure covering the relevant method and sector, and containing errors and/or omissions.	_



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

The paper will consist of 30 multiple choice questions covering the test method and 20 multiple choice questions in the industry sector plus one or more NDT procedure writing exercises.

Duration: Part D, two minutes per question.

Part E, three minutes per question.

Part F, 3 Hours maximum.

Pass Mark: 70% in EACH of the above three (3) parts

5.3.3 Practical Examination Level 3

Applicants at level 3 must have satisfactorily completed the applicable ISO 9712 level 2 practical examination within the previous 10 years in the NDT method and industry sector for which they are seeking level 3 certification.

Note: All applicants granted level 3 certification must re-sit the practical examination at the completion of 10 years from the previous practical examination. For example, if a candidate with a level 2 certificate in year 3 of issue 2, i.e. in year 8 from the last practical examination, applies for level 3 and is successful then they must re-sit a practical examination after another 2 years. In this case the level 3 certificate provided will be at issue 2 with a 2 year expiry date. This rule is to ensure candidates upgrading to level 3 cannot potentially practice for 19 years without re-sitting a practical examination.

5.3.4 Examination Exemptions: ISO 9712 - Level 3

A certified level 3 individual changing sectors, or adding another sector in the same NDT method, need not retake the basic examination or the level 3 knowledge relating to the test method of the main-method examination.

Applicants seeking Level 3 certification in more than one NDT method are exempted the Basic Examination provided it has been satisfactorily passed at the first Level 3 Application, and provided that the first Main Method Examination is passed within five (5) years of passing the Basic Examination.

5.3.5 Limited NDT Qualification - Requirements for ISO 20807

Examinations under ISO 20807 comprise two examinations:

- A General Examination covering the particular NDT method and application of that method in the particular application.
- A practical examination to assess competence.

5.3.6 Heat Treatment of Welds in Steel Using Electrical Resistance Equipment – AINDT HT-01

- A General Examination of 2 hours duration consisting of multi choice and short answer questions.
- A practical examination of 4 hours duration on electrical weld heat treatment set-up and instrument recording.

5.3.7 Candidate Requirements for examinations

At the examination, the candidate shall have in his possession valid proof of identification and an official notification of the examination, which shall be shown to the examiner or invigilator upon demand.

Any candidate who, during the course of the examination, does not abide by the examination rules or who perpetrates, or is an accessory to, fraudulent conduct shall be excluded from all further qualification examinations for a period of at least one year.

Candidates shall not be permitted to bring into the examination area personal items, unless specifically authorised to do so by the examiner.



Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

6 INTERNATIONAL QUALIFICATIONS

This Section deals with policy and actions by the AINDT to process applications from persons applying for ISO 9712 certification, or ISO 20807 qualification, who **hold ISO 9712 NDT certifications** not granted by AINDT.

The AINDT is signatory to a Multilateral Recognition Agreement with the ICNDT. Persons with certification from an ICNDT signatory certification scheme may be granted entry to the ISO9712 certification from AINDT.

AINDT accepts international transfers from other ISO9712 Schemes. On the condition that a gap analysis is performed on the International ISO9712 Certification, to ensure it is a direct equivalent to the AINDT Certification (Product Sector) the Candidate is seeking to transfer to.

Any gaps found with the Candidate's practical examination, from the International ISO9712 Certification, will require a full practical examination at a recognised AINDT AQB.

Applicants wishing to gain AINDT Certification based on Certification issued by a body who is a signatory of the ICNDT MRA Schedule 2, must provide the following documentation at the time of applying for AINDT Certification, applications will not be considered if all the information stated below is not received at the time of application;

- The applicant must submit a fully completed AINDT initial certification application
- The applicant must submit a copy of the original application submitted to the Certification Body whom certification transfer is requested, or the equivalent information as required for initial certification (examination records, training records, verified experience records at the time of application)
- The applicant must submit evidence of examination results awarded which will include examinations dates, issued by the Certification Body whom transfer is requested.

The validity of the ISO9712 certification granted on transfer from an AINDT recognised Certification scheme will be the same as the expiry date of the current overseas certification. For example, the ISO9712 certification granted for a PCN certification expiring in, say, October 2014 would also expire in October 2014. At that time the ISO9712 certification is subject to the procedure for 'Renewal' or 'Recertification', depending upon whether the international certification is an Issue 1 or Issue 2.

Should the certification being transferred be due to expire around the time of transfer, the applicant will be required to complete an initial certification application to transfer the international certification to the AINDT as well as a renew or recertification application to then renew of recertify the certification under the AINDT scheme rules.

Due to differences within certification scheme product sectors, the AINDT may require candidates to provide further evidence of satisfactory training and may also be required to sit further examinations to satisfy AINDT requirements. Below are two examples of such cases:

Example 1: A candidate wishing to transfer an ISO9712 Radiographic Interpretation (RI) qualification to AINDT Radiographic Testing certification (RT). The candidate will be required to show evidence of 120 hours recognised training (note that the training for RI can be counted towards the RT training hours) and will be required to sit the AINDT RT Specific and full practical examinations

Example 2: A candidate wishing to transfer an ISO9712 single sector Eddy Current certification (ET) to the AINDT ET multi sector certification. The candidate is required to show evidence of satisfactory approved training hours and sit the AINDT ET multi sector Specific and full Practical examinations.

Example 3: A candidate wishing to transfer an ISO9712 UT L2 or L3 Welds certification to the AINDT L2 or L3 UT Welds certification must show evidence that the original examinations sat covered all weld configurations i.e. Butt welds in Plate, Pipe & Tee. Candidates who are unable to show evidence of all weld configurations will be required to sit and pass the AINDT UT L2 practical examination.



Phone: (03) 9486 9267 Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

6.1 APPRAISAL OF QUALIFICATIONS AND EXPERIENCE

Applications for a particular method should be accompanied by:

- Certified copies of ISO9712 certificates and other documentation on training and examinations, required.
- Resume of work experience.

As a guide to applicants with international qualifications who are seeking recognition of the qualifications, the AINDT will only consider these qualifications where the qualification scheme, under which they were issued, complies with the requirements of ISO 9712 from a Certifying Body endorsed as complying with ISO 17024. In addition to the usual application form, applicants in such instances are expected to provide certified documentary evidence (in English) showing compliance with these standards to enable the AINDT to make the necessary evaluation.

Applicants wishing to transfer to the AINDT certification scheme, who hold overseas qualifications recognised by AINDT which are issued within Non-English speaking countries, must be accompanied by evidence of an IELTS Band Score of 6.0.

6.2 PERSONAL INTERVIEW

At the discretion of the AINDT Certification Board, applicants may be subjected to a personal interview to cover issues not clear from the written application.

7 SPECIAL ARRANGEMENTS

7.1 EUROPEAN PRESSURE EQUIPMENT DIRECTIVE (PED) APPROVAL

The Institute has a Memorandum of Understanding with the British Institute of NDT (BINDT) to provide approval to ISO 9712 certificated persons to undertake NDT as required by the European Pressure Equipment Directive 97/23/EC for permanent joints on pressure equipment in the classes III and IV. BINDT is a Recognised Third Party Organisation (RTPO), and is the issuing authority for these approvals.

Persons seeking approval must make application by electronic transmission only on the form available on the AINDT web site.

7.2 MULTILATERAL RECOGNITION AGREEMENT WITH ICNDT/EFNDT

The Institute is signatory to a Multilateral Recognition Agreement with the both ICNDT, and the European Federation of NDT (EFNDT), for recognition of certification of persons by the signatory certification bodies operating a 3rd party certification programme in accordance with ISO17024 and providing certification to ISO 9712. The AINDT procedure for recognition of personnel from overseas is defined in the relevant section of this Guide. Details of the agreement are available on the AINDT Institute's web site.

This agreement is primarily for the benefit of Australian manufacturers who have had their product tested by AINDT certificated personnel and who wish to export their product to other countries. Signatories of the MRA will recognise each member's certification process.



Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

8 WITHDRAWAL OF CERTIFICATION

8.1 MISREPRESENTATION OF CERTIFICATION

Applicants who are found to be forging, or otherwise misrepresenting examination results for certification will be referred to the AINDT's Discipline Committee.

8.2 CERTIFICATION WITHDRAWAL

Should a complaint of a Code of Ethics violation or an abuse of the requirements for use of Certificates, Logos/marks, be notified to AINDT, and the complaint against the Qualified/Certified person be proven by the AINDT Discipline Committee, Qualification/Certification may be withdrawn for a period at the discretion of the NDT Certification Board.

To regain certification, the person shall apply to the AINDT after expiration of the period of withdrawal, as a new applicant and shall pass all relevant examinations for the NDT Method/Industry Sector.

An appeals committee is available if required by the disqualified person.

8.3 AINDT CODE OF ETHICS

All AINDT Certificate holders shall sign to abide by the AINDT Code of Ethics, in all matters relating to the Institute or when discharging their professional duties:

- Comply with the relevant provisions of the certification scheme.
- Make claims only with respect to the scope for which certification has been granted.
- Not use the certification in such manner as to bring the AINDT or the Certification Board into disrepute, and not make any statement regarding the certification which may be considered misleading or unauthorised.
- Discontinue the use of all claims to certification that contain any reference to the AINDT or the Certification
 Board or to certification upon suspension or withdrawal of certification, and return any certificates and/or
 I/D cards issued by the Certification Board.
- Not use the certificate or ID card in a misleading manner.

The entire AINDT Code of Ethics can be found on the AINDT website

9 COMPLAINTS AND APPEALS

All complaints and appeals will be managed in accordance with the AINDT <u>Complaints and Appeals Policy</u> located on the AINDT website:



Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

ANNEX A: AINDT EXAMINATION CONTENT

LIQUID PENETRANT

AINDT PT1-GENERAL QUALIFICATION EXAMINATION CONTENT

	THEORY GENERAL SPECIFIC		PRACTICAL	
			SPECIMENS	
DESCRIPTION	40 questions multiple choice	20 questions multiple choice	Inspection of 2 specimens to ISO3452	
DURATION	1 hour, 20 minutes	1 hour	Contact AINDT AQB for exact requirement	
PASS MARK	70%	70%	70% in each specimen.	
RESOURCES	Closed Book	Closed Book	Open Book	
COMMENTS	Additional time may be granted dependant on ambient temperature.			

AINDT PT2-MULTISECTOR QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL	
	GENERAL	SPECIFIC	SPECIMENS	WORK INSTRUCTION
DESCRIPTION	40 questions multiple choice	30 questions multiple choice	Inspection of 3 specimens to ISO3452 - Visible and Fluorescent Technique	
DURATION	1 hour, 20 minutes	1 hour, 30 minutes	Contact AINDT AQB for exact requirement	
PASS MARK	70%	70%	70% in each specimen.	70%
RESOURCES	Closed Book	Closed Book	Open Book Copy of ISO3452 Only	
COMMENTS	Additional time may be granted dependant on ambient temperature.			



Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

MAGNETIC PARTICLE

AINDT MT1-GENERAL QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL
	GENERAL	SPECIFIC	SPECIMENS
DESCRIPTION	40 questions multiple choice	20 questions multiple choice	Inspection of 2 specimens to ISO9934 - Visible and Fluorescent Technique
DURATION	1 hour, 20 minutes	1 hour	Contact AINDT AQB for exact requirement
PASS MARK	70%	70%	70% in each specimen.
RESOURCES	Closed Book	Closed Book	Open Book

AINDT MT2-MULTISECTOR QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL	
	GENERAL	SPECIFIC	SPECIMENS	WORK INSTRUCTION
DESCRIPTION	40 questions multiple choice	30 questions multiple choice	Inspection of 3 specimens to ISO9934 - Visible and Fluorescent Technique	
DURATION	1 hour, 20 minutes	1 hour, 30 minutes	Contact AINDT AQB for exact requirement	
PASS MARK	70%	70%	70% in each specimen. 70%	
RESOURCES	Closed Book	Closed Book	Open Book	Copy of ISO9934 Only



Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

EDDY CURRENT

AINDT ET1-GENERAL ENGINEERING QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL
	GENERAL	SPECIFIC	SPECIMENS
DESCRIPTION	40 questions multiple choice	20 questions multiple choice	Inspection of 2 x Welds to ISO17643
DURATION	1 hour, 20 minutes	1 hour	Contact AINDT AQB for exact requirement
PASS MARK	70%	70%	70% in each specimen.
RESOURCES	Closed Book	Closed Book	Open Book

AINDT ET2-MS QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL	
	GENERAL	SPECIFIC	SPECIMENS	WORK INSTRUCTION
DESCRIPTION	40 questions multiple choice	30 questions multiple choice	a) Inspection of 1 x Weld to ISO17643 b) Inspection of 4 x Tubes (approx. 400mm in length) c) Low Frequency Inspection of corrosion sample (200mm x 150mm) d) Manual conductivity sorting of 5 samples.	To ISO17643
DURATION	1 hour, 20 minutes	1 hour, 30 minutes	Contact AINDT AQB for exact requirement	
PASS MARK	70%	70%	70% in each specimen.	70%
RESOURCES	Closed Book	Closed Book	Open Book	Copy of ISO17643 Only



Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

ULTRASONICS

AINDT UT1-GENERAL QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL
	GENERAL	SPECIFIC	SPECIMENS
DESCRIPTION	40 questions multiple choice	20 questions multiple choice	Inspection of: 1 x Corrosion Sample Approx. 150mm x 150mm 1 x Lamination Sample Approx. 150mm x 100mm
DURATION	1 hour, 20 minutes	1 hour	Contact AINDT AQB for exact requirement
PASS MARK	70%	70%	70% in each specimen.
RESOURCES	Closed Book	Closed Book	Open Book

AINDT UT2-WELDS QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL	
	GENERAL	SPECIFIC	SPECIMENS	WORK INSTRUCTION
DESCRIPTION	40 questions multiple choice	30 questions multiple choice	Inspection of 3 specimens to AS2207 – 1 x Plate, 1 x Pipe, 1 x Tee	To AS2207
DURATION	1 hour, 20 minutes	1 hour, 30 minutes	Contact AINDT AQB for exact requirement	
PASS MARK	70%	70%	70% in each specimen. 70%	
RESOURCES	Closed Book	Closed Book	Open Book Copy of AS2207 O	



Phone: (03) 9486 9267 Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

AINDT LIT2-CDM OUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL	
	GENERAL	SPECIFIC	SPECIMENS	WORK INSTRUCTION
DESCRIPTION	40 questions multiple choice	30 questions multiple choice	Inspection of 3 specimens to AS2452.3 – 1 x Plate, 1 x Small Diameter Pipe, 1 x Large Diameter Pipe	
DURATION	1 hour, 20 minutes	1 hour, 30 minutes	Contact AINDT AQB for exact requirement	
PASS MARK	70%	70%	70% in each specimen. 70%	
RESOURCES	Closed Book	Closed Book	Open Book	Copy of ISO 16809 Only

AINDT TOFD2-WELDS QUALIFICATION EXAMINATION CONTENT

	THEORY	PRACTICAL		
	SPECIFIC	SPECIMENS	DATA ANALYSIS	WORK INSTRUCTION
DESCRIPTION	30 questions multiple choice	a) Inspection of 1 weld sample <15mm thickness b) Inspection of weld sample > 19mm thickness.	3 Weld Data Files	To ASTM E2373
DURATION	1 hour, 30 minutes	Contact AINDT AQI	3 for exact requi	rement
PASS MARK	70%	70% in each specimen.	70% per data file	70%
RESOURCES	Closed Book	Open Book	Open Book	Copy of ASTM E2373 Only



Phone: (03) 9486 9267 Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

AINDT PAUT2-MS QUALIFICATION EXAMINATION CONTENT

	THEORY	PRAC	CTICAL
	SPECIFIC	WELDS	CORROSION
DESCRIPTION	30 questions multiple choice	a) Inspection of 1 weld sample <15mm thickness b) Inspection of weld sample > 19mm thickness.	Inspection of 1 corrosion sample.
DURATION	1 hour, 30 minutes	Contact AINDT AQB for exa	ct requirement
PASS MARK	70%	70% in each specimen.	70% per set
RESOURCES	Closed Book	Open Book	Open Book

RADIOGRAPHY

AINDT RT2-WELDS QUALIFICATION EXAMINATION CONTENT

	THEORY			PRACTICAL	
	GENERAL	SPECIFIC	SPECIMENS	FILM VIEWING	WORK INSTRUCTION
DESCRIPTION	40 questions multiple choice	30 questions multiple choice	Inspection of 2 specimens to AS2177	12 Films	To AS2177
DURATION	1 hour, 20 minutes	1 hour, 30 minutes	Contact AINDT AQB for exact requirement		
PASS MARK	70%	70%	70% in each specimen.	70% per film	70%
RESOURCES	Closed Book	Closed Book	Open Book	Open Book	Copy of AS2177 Only
COMMENTS	¹ Additional time may be granted dependant on radiographic facilities.				



Phone: (03) 9486 9267 Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

AINDT RT2-WELDS CR/DR QUALIFICATION EXAMINATION CONTENT

	THEORY	PRACTICAL		
	SPECIFIC	SPECIMENS	IMAGE VIEWING	WORK INSTRUCTION
DESCRIPTION	30 questions multiple choice	Inspection of 2 specimens to ISO17636-2	12 Digital Images	To ISO17636-2
DURATION	1 hour, 30 minutes	Contact AINDT AQB for exact requirement		
PASS MARK	70%	70% in each specimen.	70% per image	70%
RESOURCES	Closed Book	Open Book	Open Book	Copy of ISO17636- 2 Only
COMMENTS	¹ Additional time may be granted dependant on radiographic facilities.			

AINDT RT2 - PROFILE CR/DR QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL		
	SPECIFIC	SPECIMENS	IMAGE VIEWING	WORK INSTRUCTION	
DESCRIPTION	30 questions multiple choice	Inspection of 2 specimens to ISO20769 Series	12 Digital Images	To ISO20769 Series	
DURATION	1 hour, 30 minutes	Contact AINDT A	Contact AINDT AQB for exact requirement ¹		
PASS MARK	70%	70% in each specimen.	70% per image	70%	
RESOURCES	Closed Book	Open Book	Open Book	Copy of ISO20769 Only	
COMMENTS	¹ Additional time may be granted dependant on radiographic facilities.				





Phone: (03) 9486 9267

Website: www.aindt.com.au Email: ndtcertification@aindt.com.au

VISUAL/OPTICAL INSPECTION

AINDT VT2-MS QUALIFICATION EXAMINATION CONTENT

	THEORY		PRACTICAL	
	GENERAL	SPECIFIC	SPECIMENS	WORK INSTRUCTION
DESCRIPTION	40 questions multiple choice	30 questions multiple choice	Contact AINDT AQB for exact requirement	To ISO17637
DURATION	1 hour, 20 minutes	1 hour, 30 minutes	Contact AINDT AQB for exact requirement	
PASS MARK	70%	70%	70% in each specimen.	70%
RESOURCES	Closed Book	Closed Book	Open Book	Copy of ISO17637 Only