



NDT CERTIFICATION EXAM GUIDE (MT2)

Per CAN/CGSB-48.9712-2022

Note: Verify that the latest, approved version of the document is used at all times. Email or printed copies are uncontrolled. Any alteration to the document shall invalidate its use.

TABLE OF CONTENTS

1	Introduction	2
2	Examination Information	3
2.1	Authorized Examination Centres (AEC).....	3
2.2	Examination Types	3
2.2.1	Practical Examinations	3
2.2.2	Situations Needing Examination	3
2.3	Note on Examinations.....	3
3	Methods.....	4
3.1	Methods for Examination	4
3.1.1	EMC Sector.....	4
4	Magnetic Testing.....	5
4.1	Level 2	5
4.1.1	Initial Examinations.....	5
4.1.1.1	Written Examination	5
4.1.1.2	Practical Examination	6
4.1.2	Renewal & Recertification Examinations.....	17
4.1.2.1	Layout & Content	17
5	Re-examinations	18
6	Complaints and Appeals	19
7	Fees	20

1 INTRODUCTION

Canadian Welding Bureau NDT Certification Body (CWB NDT CB) is a national, independent and not-for-profit entity acting as a certification body for NDT certification and recertification of personnel in accordance with CAN/CGSB-48.9712-2022.

The purpose of this guide is to inform individuals and existing certified NDT personnel about examinations for certifications to CAN/CGSB-48.9712-2022 through CWB's NDT Certification Body's Certification Scheme. This guide only applies to the CWB NDT Certification Body and may not apply in-part or in-full to other certification schemes adhering to CAN/CGSB-48.9712-2022.

Contact Information:

Toll-free Help Line: [1-800-844-6790](tel:1-800-844-6790)

Email: info@cwbgroupp.org

Website: <https://www.cwbgroupp.org/>

2 EXAMINATION INFORMATION

2.1 AUTHORIZED EXAMINATION CENTRES (AEC)

Due to the requirements of these examinations, they can only be performed at Authorized Examination Centres (AECs). The location of CWB AECs can be found on the CWB website at www.cwbgroup.org.

Both written and practical examinations will need to be booked directly with the above AECs and invigilation and/or facility use fees **must be paid directly** to the AEC. Please contact the specific AEC for pricing. Exam paper and grading costs for the *first* attempt is covered by CWB within the application fees per Form 505 or as listed on CWB's website.

2.2 EXAMINATION TYPES

There are two examination types: written (multiple choice) examinations or practical examinations.
Written (multiple-choice) Examinations

All written examinations are multiple choice examinations which are exclusively delivered via a computer-based examination system. This allows CWB to ensure fairness and security of the examinations and immediately provide results to all candidates.

2.2.1 Practical Examinations

Practical examinations are hands-on or essay type examinations that are conducted in-person only at an Authorized Examination Centre (AEC) approved by CWB specifically for NDT Practical Examinations.

2.2.2 Situations Needing Examination

The following scenarios require examinations:

1. Initial Certification of any method/level.
2. Renewal, if personnel is unable to satisfy the requirements for Structured Credit System or chooses not to use structured credit.
3. Recertification, practical examinations required for all levels. Level 3 also requires a written examination if personnel is unable to satisfy the requirements for Structured Credit System or chooses not to use structured credit.

More information can be found in CWB's Form 500 – NDT Personnel Application Guide.

2.3 NOTE ON EXAMINATIONS

CWB's NDT Personnel Certification examinations are designed to test an individual's competence based on the training materials and typical real-world situations. The exams do not present all situations or all requirements of a certified NDT personnel, nor does a pass guarantee certification. The competence and skills for any particular role must be attained during the course of work experience and continual training and education. It is the responsibility of the certified NDT personnel and their employer ensure they have the correct training and experience to complete their job adhering to the code of ethics. Failure to do so may result in the suspension or cancellation of an individual's certification.

3 METHODS

3.1 METHODS FOR EXAMINATION

Within the scope of CWB's certification scheme, the following are the current methods and levels available for certification and examination under CAN/CGSB-48.9712-2022:

- a) Magnetic (Particle) Testing (MT), Levels 2 and 3
- b) Penetrant Testing (PT), Levels 2 and 3
- a) Ultrasonic testing (UT), Levels 1, 2 and 3 (Coming soon)
- b) Radiographic Testing (RT), Levels 1, 2 and 3 (Coming soon)
- c) Eddy current Testing (ET), Levels 1, 2 and 3 (Coming soon)

Currently, there is only the EMC sector being offered by CWB, as below.

3.1.1 EMC Sector

The Engineering, Materials and Components (EMC) Sector includes manufacturing, fabrication, construction, and general inspections in Canadian industry. Below are the areas of products and industry it covers in general:

- Castings and forgings, composed of ferrous or non-ferrous metallic alloys
- Extrusions of shapes and seamless tubing composed of ferrous or nonferrous metallic alloys
- Wrought product that has been rolled to form plates, blooms, bars or rods and composed of ferrous or nonferrous metallic alloys
- Welds including brazing or soldering that is utilized during fabrication of ferrous or nonferrous metallic alloys
- Composite materials concrete, plastics, and ceramics

4 MAGNETIC PARTICLE TESTING

4.1 LEVEL 2

4.1.1 Initial Examinations

4.1.1.1 Written Examination

4.1.1.1.1 Layout & Content

Written Examinations comprise of two elements:

1. General Examination Element which tests knowledge of the theory of the method.
2. Specific Examination Element (EMC Exam) which test knowledge of the applications of the method, this may also include field related Materials & Processes questions and Code related questions.

Below is a summary of the MT2 Initial Written Examinations:

Exam Elements	Exam Questions & Parts	Duration	Pass Grade
MT2 General Written	<ul style="list-style-type: none">• 40 multiple choice questions on MT theory	1 hour 20 mins	70% or higher
MT2 Specific (EMC) Written	<ul style="list-style-type: none">• 50 multiple choice questions<ul style="list-style-type: none">○ 20 M&P○ 10 Codes○ 20 applications	2.5 hours	70% or higher

4.1.1.1.2 Study References

Your MT2 training notes and material from your Recognized Training Organization (RTO) course should cover most of your required knowledge for the written examinations. The below references should also be studied in preparation for the written examination:

- Nondestructive Testing Handbook, *Vol. 8: Magnetic Particle Testing (MT)*, Latest Edition by ASNT
- ASM Handbook, Volume 17: *Nondestructive Evaluation of Materials* by ASM International
- Metallurgy for the Non-Metallurgist, *Second Edition* by ASM International

4.1.1.1.2.1 Codes and Standards

The following codes and standards should be reviewed to familiarize and address the code portion of the Specific (EMC) exam:

- ASME BPVC Section V, Article 7, *Magnetic Particle Examination*, Latest Edition.
- ASTM A275: “*Standard Practice for Magnetic Particle Examination of Steel Forgings*”, Latest Edition.
- ASTM A456/A456M: “*Standard Specification for Magnetic Particle Examination of Large Crankshaft Forgings*”, Latest Edition.
- ASTM E709: “*Standard Guide for Magnetic Particle Testing*”, Latest Edition.

- ASTM E1444/E1444M: “Standard Practice for Magnetic Particle Testing for Aerospace”, Latest Edition.
- ASTM E3024/E3024M: “Standard Practice for Magnetic Particle Testing for General Industry”, Latest Edition

4.1.1.2 Practical Examination

Below is a summary of the Initial MT2 practical exam:

Exam Elements	Exam Questions & Parts	Duration	Pass Grade
MT2 Practical (EMC)	<ul style="list-style-type: none"> • Performance & Calibration Checks • Inspect 4 specimens <ul style="list-style-type: none"> ○ 2 yoke using visible, prepared MT black suspension. ○ 2 wet bench using fluorescent bath • Written Instruction for one of the inspected specimen. 	8 hours	70% or higher for each part

4.1.1.2.1 Layout & Content

There are four components to the practical examination that the candidate will need to pay attention to for the initial examinations. Below are those components and *suggested* timing, each candidates’ preferences may differ.

Initial Exam Components	Suggested Time Spent*
1. Review Instruction Manual	<i>½ hour</i>
2. Three Verification / Performance Checks	<i>1 hour</i>
3. MT of Four Test Specimens	<i>5½ hours</i>
4. MT Instruction Writing for 1 of the 4 MT Specimens	<i>1 hour</i>
Total Duration	8 Hours

*The above timings are suggestions, each candidate may require more or less time for each section of the exam; CWB does not require any candidate to adhere to these timings.

4.1.1.2.1.1 Reviewing Instruction Manual

The Instruction Manual for MT2 must be reviewed in detail prior to performing any exam tasks. The candidate is expected to adhere to the requirements outlined in the Instruction Manual and clarify any misunderstandings with the Invigilator.

General Instructions may include:

1. SAFETY: Take all required Safety Precautions during laboratory use of equipment, accessories and relevant material/chemicals. Required Personnel Protective Equipment shall be properly worn as directed by the Invigilator.
2. Candidates approved for ‘Special Accommodation’ by the CWB NDT Certification Body, shall verify the required accommodation is provided with the Invigilator.
3. This is a closed book examination.

4. No reference or access to any material(s) or electronic devices is allowed.
5. All required equipment, accessories, and paperwork shall be provided at the exam centre.
6. No exam related paperwork or material shall leave the exam room. All sheets in the examination package, including blank or rough work sheets, shall be returned to the Invigilator at the end of the exam.
7. Carefully read all the questions and answer in the space provided.
8. Comply to all examination instructions including those provided by the Authorized Exam Centre and the Invigilator.
9. The candidate shall be shown proper use of the equipment as required by the Invigilator.
10. Completely fill in the information in the Examination Reporting Sheets using blue or black pen.
11. Record units for all measurements taken. Only the metric units (mm, deg. C, etc.) shall be used.
12. In case of violation of the examination requirements or unsafe operation of the equipment, the Invigilator may terminate the examination immediately.

4.1.1.2.1.2 Verification/Performance Checks

There are three verifications/performance checks that are required to be completed:

- i) Wet Bench Ammeter Accuracy Check- Verify accuracy of 'Unit's Ammeter' against 'Test Ammeter' (Shunt Test Kit) by plotting comparative current readings encompassing the usable range.
- ii) Settling Test for Particle Concentration: Verify and record particle concentration for the in-use, fluorescent bath for the Wet Bench. The particle concentration shall be recorded along with the units of measurement. Particle concentration shall be within acceptable range prior to proceeding with the specimen examination.
- iii) Black Light Intensity: Verify maximum U.V 'A' light intensity with calibrated U.V. light meter at measured distance. Report the readings along with the measurement units. Proceed with MT when the minimum light intensity requirements are met.

Be sure to familiarize yourself with the equipment and fill out all the required parameters **and include all units.**

4.1.1.2.1.3 MT of Test Specimens

MT of the test specimens should occur after the performance/verification checks above are completed. The inspection of the test specimens should adhere to the following:

1. NO Examination Specimen surface preparation is allowed. DO NOT mark on the Examination Specimen, Equipment, Accessories, Reference Test Block or Part.
2. Only AC/DC Electromagnetic Yoke shall be used for examination, Permanent Yoke is not allowed.
3. Perform required calibration verification / performance check(s).
4. MT shall be performed as per the requirements stated within the Specimen Examination Documents and ASME Section V, Article 7 Magnetic Particle Examination.
5. Perform MT for the required Specimen Surface Area for 100% coverage. The specimen drawing provides the information in the 'Scope of MT' section.
6. Map indications and record details in the MT Specimen Drawing using a red color pen only.
7. Indication # assigned to an indication along with the indication details are recorded in the drawing.
8. Post MT, demagnetize each MT Specimen. Verify the residual magnetic field is less than 4 Gauss.
9. No post cleaning is required for MT Specimens.
10. Follow the Acceptance Criteria in the Instruction Manual to accept or reject indications.

Report and documentation are an essential part of the exam, and may include mark-up of drawings, report completion and technique sheet completion. The following are the expectations of reporting/documentation for the MT2 Practical Exam:

MT SPECIMEN AND REPORTING DOCUMENTATION:

1. Each specimen is traceable to a Unique Specimen Number.
2. MT documentation for each specimen is provided, which includes:
 - i) MT Report.
 - ii) Specimen Drawing.
 - iii) MT Technique Sheet. **NOTE: This is applicable for the Wet Bench Specimen Only.**
3. **MT REPORT:**
 - i) There are two separate MT Report Forms based on the technique used. For Yoke, there is 'MT Report - Yoke' and for Wet Bench there is 'MT Report - Wet Bench'.
 - ii) Each of these MT Reports can be used for up to two specimens that are tested by the same technique. **For Example:** Up to two specimens tested by Yoke will have one common 'MT Report - Yoke' and up to two specimens tested by Wet Bench will have one common 'MT Report - Wet Bench'.
 - iii) Based on the technique used for the specimen(s), complete the relevant MT report(s).
4. **SPECIMEN DRAWING:** Each MT Specimen will have a unique specimen drawing sheet that includes the following information:

- i) Specimen # (*generic*), Specimen Name and Description.
- ii) Scope of MT and Surface Area to be Tested.
- iii) MT Technique to be used, such as Yoke or Wet Bench.

NOTE: Record Specimen # AS STAMPED on the Specimen in the MT reporting documentation.

5. TECHNIQUE SHEET:

- i) NOTE: The technique sheet is applicable only for Wet Bench technique.
- ii) There is unique technique sheet for each MT - Wet Bench specimen.
- iii) The technique sheet includes the specimen's drawing along with its geometric dimensions.
- iv) MAP AND RECORD DETAILS OF THE REQUIRED TECHNIQUE SHOTS. ENSURE COMPLETE COVERAGE OF THE TEST AREA.
- v) Use the pictorial representations to show each shot, such as Head Shot, Central Conductor, and Coil Shot.
- vi) Each shot shall include required details, example Current for Central Conductor state applicable rotations and central conductor bar information, etc.
- vii) Demagnetization shot - include type of demagnetizing coil used with number of turns.

EXAMPLES OF MT COMPLETED DOCUMENTATION AS BELOW:

1) Yoke- completed MT Report and Specimen Drawing.



MT REPORT- YOKE

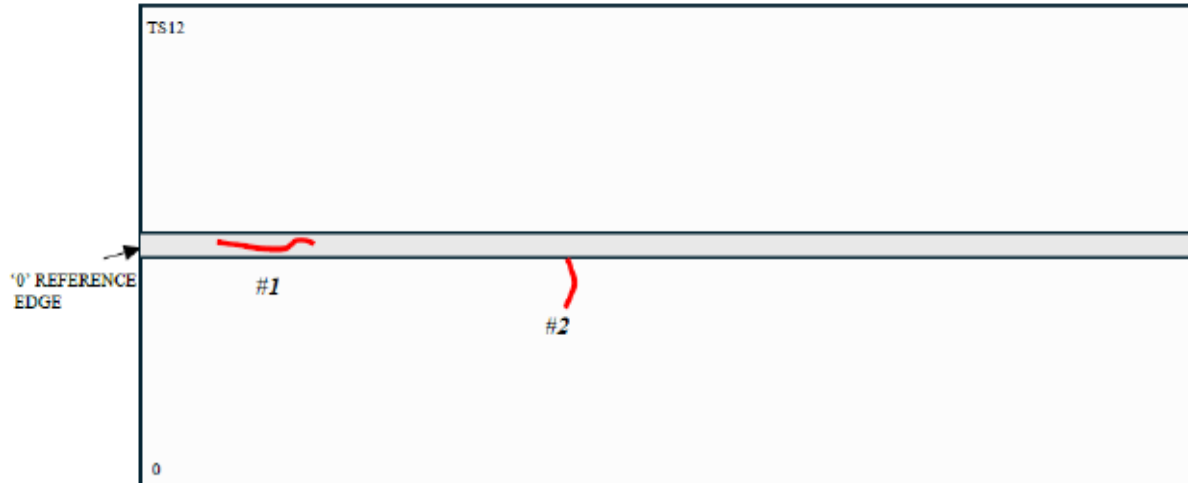
SPECIMEN/S & MT REQUIREMENT:					
		1st SPECIMEN, INFORMATION RECORDED BELOW:		2nd SPECIMEN, INFORMATION RECORDED BELOW: <i>(When applicable)</i>	
SPECIMEN #:		TS12		N/A	
SPECIMEN NAME:		Butt Welded CS Plate			
MT SCOPE/ AREA TESTED:		100% Weld.			
MT ACCEPTANCE CRITERIA #:		ER2			
EQUIPMENT, MATERIAL & TECHNIQUE:					
CURRENT: <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <i>(Check mark ✓)</i>		MAGNETIZATION: <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> RESIDUAL <i>(Check mark ✓)</i>		MT MEDIUM (BATH/PARTICLES): <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY <i>(Check mark ✓)</i>	
YOKE:		MT PREPARED BATH/PARTICLES:		WHITE CONTRAST PAINT:	
MAKE:	TAS	MANUFACTURER:	TOJNU	MANUFACTURER:	TOJNU
MODEL:	T3			TYPE/BRAND:	WC3
SERIAL #:	1990		KJ2		
CALIBRATION DUE DATE:	05/15/2024	WHITE LIGHT INTENSITY:		150 footcandles	
MT RESULTS					
1st SPECIMEN ATTACHMENT: <i>(1st specimen # as above)</i> 1. SPECIMEN DRAWING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <i>(Check mark ✓)</i>			2nd SPECIMEN ATTACHMENT: <i>(When applicable, 2nd specimen # as above)</i> 1. SPECIMEN DRAWING <input type="checkbox"/> YES <input type="checkbox"/> NO <i>(Check mark ✓)</i>		
COMMENTS- 1st SPECIMEN			COMMENTS- 2nd SPECIMEN <i>(when applicable)</i>		
Indications as mapped on the attached drawing.			N/A		
SIGNATURE & CERTIFICATION:					
NAME: (PRINT) TERRY SINGH	SIGNATURE: <i>TSingh</i>	CWB REGISTRATION # 032690	CGSB CERTIFICATION# ---	DATE: 03/26/2024	



MTL2 PRACTICAL EXAM

SPECIMEN DRAWING- TO MAP INDICATIONS & RECORD DETAILS

SPECIMEN #: TS12	SPECIMEN NAME: Butt welded CS plate	Dimensions: length= xx mm width = xy mm thickness=xz mm
SPECIMEN DESCRIPTION: Butt welded plate. Welding process-FCAW. Plate has been in service.		
MT SCOPE: 100% weld.		
TECHNIQUE: MT using Yoke and a can of visible, wet prepared bath.		
ACCEPTANCE CRITERIA: Refer Acceptance Criteria in the given document # 26.		



INDICATION #	INDICATION SIZE/LENGTH	DISTANCE FROM '0' REFERENCE EDGE	DESCRIPTION	ACCEPT/ REJECT
1	13 mm length	25 mm	Fatigue, surface, longitudinal crack on weld cap.	Reject.
2	9 mm length	75 mm	Fatigue, surface, transverse, crack in the HAZ.	Reject.
NAME: PRINT TERRY SINGH			SIGN: TSingh	DATE: 03/26/2024

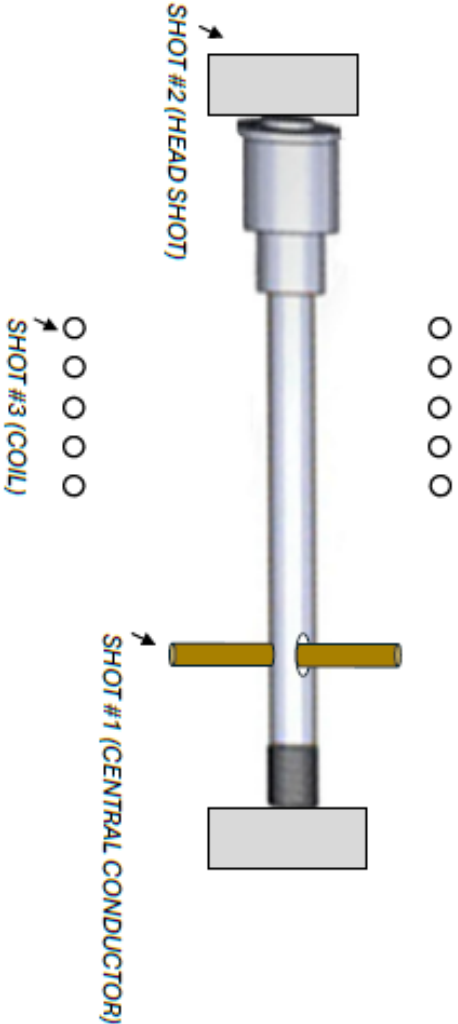
2) Wet Bench- completed MT Report, Specimen Drawing and Technique Sheet:



MT REPORT-WET BENCH

SPECIMEN/S & MT REQUIREMENT:				
		1 ST SPECIMEN, INFORMATION RECORDED BELOW:		2 ND SPECIMEN, INFORMATION RECORDED BELOW: (when applicable)
SPECIMEN #:	WS12		N/A	
SPECIMEN NAME:	Forged TSW Pin			
MT SCOPE/ AREA TESTED:	100% Surface			
MT ACCEPTANCE CRITERIA #:	SD2			
EQUIPMENT, MATERIAL & TECHNIQUE:				
CURRENT: <input type="checkbox"/> DC <input checked="" type="checkbox"/> 3φ FWDC <input type="checkbox"/> _____ state if other (Check mark ✓ & state current for other)		MAGNETIZATION: <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> RESIDUAL (Check mark ✓)		MT MEDIUM (BATH/PARTICLES): <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY (Check mark ✓)
WET BENCH:		MT PREPARED BATH-PARTICLES:		MT PREPARED BATH-VEHICLE:
MAKE:	TADI	MANUFACTURER:	ADI	MANUFACTURER: ADI
TYPE/BRAND:	AK1	TYPE:	FLT1	TYPE: FLOI
SERIAL #:	2603			
CALIBRATION DATE:	05/22/2024	U.V. LIGHT INTENSITY: 2,100 Microwatts/cm ²		
MT RESULTS:				
1ST SPECIMEN - ATTACHMENT: (1 st specimen - as above. Check mark ✓)		2ND SPECIMEN - ATTACHMENT: (2 nd specimen, when applicable. Check mark ✓)		
1. SPECIMEN DRAWING: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		1. SPECIMEN DRAWING: <input type="checkbox"/> YES <input type="checkbox"/> NO		
2. TECHNIQUE SHEET: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		2. TECHNIQUE SHEET: <input type="checkbox"/> YES <input type="checkbox"/> NO		
1ST SPECIMEN - COMMENTS		2ND SPECIMEN - COMMENTS		
Indications mapped on the attached Specimen Drawing.		N/A		
SIGNATURE & CERTIFICATION:				
NAME: (PRINT) TERRY SINGH	SIGNATURE: TSingh	CWB REGISTRATION# 90326	CGSB CERTIFICATION: --	DATE: 03/26/2024

MT TECHNIQUE- WET BENCH

PART # <u>WS2</u>		PART DESCRIPTION: <u>Forged TSW/Pin</u>	
			
SHOT #	TECHNIQUE SELECTION	CURRENT	COMMENTS
SHOT # 1	CENTRAL CONDUCTOR	800 A	COPPER BAR, LENGTH MINIMUM 10" WITH 0.5" DIAMETER. CENTRAL CONDUCTOR CLAMPED BETWEEN HEADS. NO ROTATION REQUIRED.
SHOT # 2	HEAD SHOT	1,000 A	-
SHOT # 3	COIL	1,200 A	5 TURN COIL.
SHOT # 4	DEMAGNETIZE	--	STAND ALONE AC DEMAGNETIZATION COIL USED, HENCE NO CURRENT SELECTION. RESIDUAL MAGNETISM LESS THAN 4 GAUSS.
NAME: <u>TERRY SINGH</u> <small>(PRINT)</small>		SIGNATURE: <u>Tsingh</u>	DATE: <u>03/26/2024</u>



cwbgroup

MTL2 PRACTICAL EXAM
SPECIMEN DRAWING- TO MAP INDICATIONS & DETAILS

SPECIMEN #: <u>WS12</u>	SPECIMEN NAME: <u>Forged TSW Pin</u>	Dimensions:
SPECIMEN DESCRIPTION: <u>Material: Carbon Steel. Forging-MT required for In-Service Specimen.</u>		Length: <u>xx mm</u>
MT SCOPE: <u>MT 100% Specimen Surface Area.</u>		Diameter: <u>xx to xx mm.</u>
TECHNIQUE: <u>MT using Wet Bench and Fluorescent Bath.</u>		
ACCEPTANCE CRITERIA: <u>Refer to the Acceptance Criteria as stated in the given document.</u>		



INDICATION #	INDICATION SIZE/LENGTH	DISTANCE FROM REFERENCE EDGE	DESCRIPTION	ACCEPT/REJECT
1	9 mm length	67 mm	Fatigue Crack at the Surface, Transversely Oriented.	Reject.
2	4 mm length	202 mm	Fatigue Crack at the Surface, Starting from the Hole. Longitudinally oriented.	Reject.
NAME: TERRY SINGH		SIGN: TSingh		DATE: 03/26/2024

4.1.1.2.1.4 Detailed Written Instruction of One Test Specimen

Write MT instruction for any **one** specimen that was examined.

Follow the format for Written Instructions as follows:

- a) Forward: Include scope of test, MT technique, reference documents.
- b) Personnel Qualification.
- c) Examination Specimen: Description or drawing, area of interest and purpose of test.
- d) List of equipment, accessories and MT medium to be used.
- e) Describe calibration procedure for the specific testing of the specimen:
- f) Describe MT instructions/procedure specific for testing of the specimen. Include test conditions including specimen surface preparation.
- g) Equipment Settings for performing MT of specimen.
- h) Report preparation and documentation: Record and classify test results and report documentation to be completed.

Use the supplied lined papers for instruction writing. FIVE lined sheets are provided. Additional sheets may be provided by the AEC, if required.

4.1.1.2.1.5 Grading of Practical Examination

The grading of the MT2 Practical Examination element shall be based on the following:

Item	Subject	Weighting (%)
1	Knowledge of NDT equipment and NDT media.	10
2	Application of NDT method	26
3	The detection of indications or discontinuities and reporting	64
Total		100

The grading of the Detailed Written Instruction of One Test Specimen element shall be per the following:

Item	Subject	% maximum
a)	foreword (scope, reference documents)	5
b)	personnel	5
c)	equipment/media to be used	5
d)	product (description or drawing, including area of interest and purpose of the test)	10
e)	test conditions, including preparation for testing	10
f)	detailed instructions for application of the test, including settings	40
g)	recording and classifying of the test results	20
h)	reporting the results	5
Total		100

All candidates must achieve a minimum grade of 70% of each element to pass the examination.

4.1.2 Renewal & Recertification Examinations

Renewal and Recertification exam content will be similar to that of the Initial Examinations except the number of test specimens will change and the technique required will be based upon the candidates' work experience.

Note that for Renewals, examination is only required if the candidate chooses not to renew via Structured Credit or is unable to achieve the Structured Credit requirement.

Below is a summary of the renewal and recertification exams.

	Exam	Exam Questions & Parts	Duration	Pass Grade
Renewal	MT2 Renewal Practical (EMC)	<ul style="list-style-type: none">• Performance & Calibration Check• Inspect 1 specimen• Written Instruction for the inspected specimen	4 hours	70% or higher for each part
Recertification	MT2 Recertification Practical (EMC)	<ul style="list-style-type: none">• Performance & Calibration CheckInspect 2 specimens• Written Instruction for one of the specimens	4 hours	70% or higher for each part

4.1.2.1 Layout & Content

Refer to the content for Initial Examinations per 4.1.1.2.

5 RE-EXAMINATIONS

The requirements for re-examinations are as follows:

1. A candidate failing for reasons of unethical behaviour shall wait at least 12 months before reapplying or as determined by CWB.
2. Fees for re-examinations must be paid prior to granting of a re-exam by CWB. AEC invigilation costs must be paid to the AEC directly.
3. For Initial Certifications:
 - a) A candidate who fails one or more elements of an examination (i.e. general, specific, practical, etc.) may retake the failed examination no more than twice:
 - i. after a minimum time of one month (which may be reduced if further training acceptable to the certification body has been satisfactorily completed)
 - ii. no later than two years after the initial examination
 - b) A candidate failing two re-examinations on one or more elements shall complete further training, acceptable to the CWB, and be required to retake all examination elements
4. For Renewals
 - a) Two re-examinations of the renewal examination shall be allowed after at least 7 days and within 12 months of the first attempt at the renewal examination.
 - b) In the event of failure in the two allowable re-examinations, the certificate shall be withdrawn. In order to reinstate certification, a candidate shall:
 - i. complete further training, acceptable to CWB; and
 - ii. retake all examination elements required for recertification.
5. For Recertifications:
 - a) Two re-examinations of the recertification examination shall be allowed after at least 7 days and within 12 months of the first attempt at the recertification examination.
 - b) In the event of failure in the two allowable re-examinations, the certificate shall be withdrawn. In order to reinstate certification, a candidate shall:
 - i. complete further training, acceptable to CWB; and
 - ii. retake all examination elements required for initial certification.

A person failing practical examination of a particular section needs re-examination of that failed element, for example, with a MT2 EMC Practical Exam, a candidate achieves the following results:

Element 1: Specimens

- Specimen 1: 86%
- Specimen 2: 90%
- Specimen 3: 57%

Element 2: Work Instruction

- Grade: 75%

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

Re-examination of Element 1: 3 Specimens required.

6 COMPLAINTS AND APPEALS

The CWB Group is committed to ensure a transparent and impartial approach to our certification programs for companies, individuals and products.

Complaints and appeals related to the activities and/or decisions of the CWB Group or related to the organizations, individuals and products we certify, can be made to the CWB Group's Registrar. All complaints and appeals and resulting outcomes will be documented and communicated back to the complainant or appellant.

Complaints and appeals can be made directly to CWB Group by calling 1-800-844-6790 or can be made through our external ConfidenceLine program.

7 FEES

See Form 505 for the fee schedule. Pricing is subject to change at CWB's discretion.