Verifier's recognition kit – subclasses 6.7, 6.8 and 18.2

MSMSS00009 Trade Measurement Verification (Limited Weighing Instrument) – subclasses 6.7 and 6.8 MSMTMVER302 Verify simple measuring instruments – subclass 18.2

Version 3.1 - August 2021

Complete this kit by typing directly into the document.

Applicant's name:	
Subclasses requested for assessment:	
Observation assessment method requested (select one)	Video calling (VC)
	Pre-recorded video/s
	In-person observation (applicant choice of site)

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Version changes

Version number	Main changes
V3.0	 Version now includes mandatory observation Added pre-completion checklist to establish readiness (inc. LLN) Re-wording of some questions/instructions, including to aid clarity. Questions added, others removed, including test report questions. Order of all subclasses questions changed. Verification form task changed to require completion using the electronic version of the form. Supervisor/mentor report now called third party report with comments required for each checkpoint. Observation report includes space for comments against each checkpoint. Kit should be completed electronically.
V3.1	Errors with tick boxes corrected

Introduction

This kit enables you to demonstrate your competence as a verifier of measuring instruments used for trade against the performance criteria and assessment requirements set out in the nationally recognised units of competency for the skill set:

MSMSS00009 – Trade Measurement Verification (Limited Weighing Instrument) – for licence subclasses 6.7 and 6.8

- MSMTMREF301 Use and maintain reference standards
- MSMTMVER401 Verify weighing instruments

and, if including subclass 18.2, for the additional unit of competency:

MSMTMVER302 Verify simple measuring instruments

On successful completion of assessment, you will receive the appropriate statement/s of attainment.

Read these instructions carefully in combination with the <u>Recognition kit instructions</u> and <u>Instructions for observation assessments</u> documents. In addition, carefully read the instructions included at the start of each section.

Before you complete and submit your recognition kit, you should:

- read through the whole kit to understand what is required of you
- spend time in the field with an experienced verifier learning about the topics in the following checklist
- complete the checklist below, to self-assess your skills and knowledge.

Please contact the NMI Administrator if you have difficulties in understanding the requirements for compiling/submitting your kit.

Email: NMIadministrator@measurement.gov.au Tel: 02 8467 3789

Thave adequate skills and knowledge in the following to be able to complete this kit, and perform these tasks in the workplace, without direct assistance:	Yes	No	Not sure
Spoken English communication			
Mathematics			
English reading skills			
Computer skills			
The instruments I intend to verify			
The techniques used in testing instruments, including planning and preparation			
Storing, maintaining and handling reference standards/test equipment			
Likely impacts of the environment on the function of instruments and/or the standards			
Work health and safety considerations relevant to testing instruments			
My organisation's and NMI requirements for recording and reporting details of verifications and other licensing matters			
Any adjustments or corrections that may be needed during the verification process			
Marking instruments for verification (what to mark and where to place the mark)			
Communicating to the owner/user of the instrument and requesting any assistance			
If you have checked 'no' or 'unsure' to any of the items in the table above, and ar	e unsu	re wha	at

RK 6.7, 6.8 & 18.2 F V3.1

Assessor checked

you need to do to be in a position to answer 'yes', please speak to your supervisor.

Check the LLN section of the <u>Participant's handbook</u> if you need to develop your mathematics or English skills (speaking or reading) before you attempt this assessment.

In addition, you should have personally tested instruments, ideally under supervision, using the relevant national instrument test procedures to develop your skills - either in the workplace or in a simulated workplace environment.

Assessment instructions

Completion of the kit

You should complete this kit by typing directly into the document or clicking on checkboxes, where appropriate.

Submit the whole document along with any additional scanned reports, documents, video/s. DO NOT, print it out and scan it.

The kit comprises a number of components for you to complete/submit, relevant to the subclasses for which you are being assessed, including the following:

- Your work history
- Written assessments complete only the parts relevant to the subclass/es you wish to verify.
- A specific question that asks you to complete one or more <u>verification forms</u> (Form 6) using the information provided in the verification form task.
- <u>Test reports</u> and, if you are being assessed for POS systems (18.2), any **documents** printed from instruments you have tested.
- Third party report a report/s from the verifier/s who worked with you during your training, or a work colleague (where you have no access to a verifier).

In addition, you will be asked to **demonstrate your skills** by completing one or more simulated verifications, observed by your assessor or a skills observer.

MAKE SURE YOU COMPLETE ALL PARTS OF THE RECOGNITION KIT APPROPRIATE TO THE INSTRUMENT SUBCLASSES YOU WISH TO VERIFY

Skills assessment requirements

In your workplace

This assessment requires that you **demonstrate** your practical skills, by completing one or more simulated **initial** verifications on instruments, in a real or simulated environment. During training within your organisation, you should have practised these skills, ideally under supervision of an experienced verifier/s, including completing the appropriate test reports that you will submit as evidence (workplace documents). The experienced verifier/s that observed you should complete a third party report/s and sign the test reports you will submit.

Wherever possible, include examples from instruments that did not meet the requirements for verification. This shows your understanding of unacceptable instrument performance.

For weighing instruments (subclasses 6.7 and 6.8)

You must provide copies of test reports relating to instruments you have tested (ideally) under supervision. You should have personally completed all the processes required as if you were completing **initial** verification of the instruments, without assistance. You will need to provide **three (3)** reports in total, including the report you complete during your skills observation/video. (This third report should be submitted immediately following observation).

Where you are being assessed for both of these subclasses, a report should be included for each subclass you intend to verify.

For POS systems (subclass 18.2)

You must provide copies of **test reports** relating to POS systems you have tested (ideally) under supervision. You should have personally completed all the processes required as if you were completing **initial** verification of those instruments, without assistance. You will need to provide **three (3) test reports in total**, including the report you complete during your skills observation/video. (The third report will usually be submitted later, following observation). **In addition**, you must provide the documents/dockets/labels printed **during testing**. The experienced verifier/s that observed you should complete a third party report/s and sign the test reports you will submit.

See the Workplace test reports section for more information.

Observation

Your assessor will need to confirm you have the necessary practical and communication skills required when verifying weighing instruments and POS systems. This includes you demonstrating knowledge of, and implementing, safe work practices. Depending on the circumstances, this will be completed by one of the following methods:

- Video calling The assessor will use video calling to complete a direct observation of you, either at your work place or another suitable location (e.g. a trader's site).
- Pre-recorded video/s You will provide a video, or series of videos, showing you completing all the stages required for verification of an instrument, in a real or simulated situation.
- In-person observation (your choice and arrangement of site) The assessor, or an NMI-appointed skills observer, will observe you completing all the processes required for verification of an instrument, either at your work place or another suitable location (e.g. a trader's site).

Be sure to mark your preferred observation method option on the <u>front</u> page of this kit and on the <u>Recognition kit checklist</u>.

- If you choose to complete the observation using video calling, your assessor will contact you to schedule a suitable time and date.
- If you have chosen to provide a video/s, and you are unable to email the video file/s, the NMI Administrator will provide a link where you can upload your video/s, after we have received your kit.
- For in-person observation at your workplace, or other suitable location of your choice, you will liaise with the assessor or skills observer.

IMPORTANT – Please see separate <u>Instructions for observation assessment.</u>

Third party reports

You should supply a report from a person (or persons) who has worked <u>directly</u> with you, and can comment on your workplace performance over time. Ideally, this person should be an existing verifier who has worked directly with you during your training AND who holds a statement/s of attainment relevant to this skillset/unit of competency and instrument subclasses. If you don't have access to a verifier during your training but have a workplace supervisor or colleague who works with you, ask them to provide a report. **Note, you may be asked to complete additional observations if you cannot provide a third party report from a verifier.**

Ask the person/s completing the report/s to read the instructions for completing their report before you finalise this kit. If more than one person can provide evidence to support your assessment, have each of them complete a separate copy of the report, for submission:

- An existing verifier should complete the Third party report (experienced verifier) only.
- Any other work colleague, who isn't a verifier, should complete the **Third party report** (non-verifier) only.

If you have access to an existing verifier, ensure they observe you testing the instruments for which you will provide <u>workplace test reports</u> for this kit. **They should sign each report you provide**, to confirm that you have correctly followed the relevant, current, national instrument test procedures for **initial verification**.

If you don't have access to anyone in your workplace who can provide either of the above third party reports, please contact the NMI Administrator.

IMPORTANT - Submission of the kit and enrolment

Once you have completed all relevant components, complete the separate <u>Recognition kit checklist</u> and the checklist on the <u>Applicant details form</u>, to check that you are submitting **all** the components required for this assessment.

Save this document on your computer, and name the file by adding your name to the file name. For example, if your name is Joe Smith, the file name for your completed kit will be:

RK 6.7, 6.8 & 18.2 F V3.0 Joe Smith.

Scan each of the **additional** documents you have completed, and save them by the name of document and the kit e.g. scan and save the test reports you are submitting as:

RK 6.7, 6.8 & 18.2 F V3.0 Test report 1 Joe Smith

If submitting videos, name them **RK 6.7, 6.8 & 18.2 F V3.0** <u>Video <instrument subclass> Joe Smith</u> Include a number for each video so your assessor can watch them in your specified sequence, e.g. Video 18.2 (1); Video 18.2 (2) etc.

Email the kit and the other scanned documents to nmiadministrator@measurement.gov.au and keep your original kit and documents. Your assessor will ask questions about your kit when they speak to you, so you need to have it available.

The NMI Administrator will advise you how to submit the video/s if you are unable to email them.

Once we have received all parts of your kit, the NMI Administrator will contact you regarding enrolment.

Assessment

Your assessor uses a number of forms to record the results of each part of your assessment. The forms are included at the end of this kit for your information.

Following enrolment, you will be assigned an assessor or an NMI-appointed skills observer (SO) for your observation (where applicable).

If a SO completes your observation, they will contact you to make arrangements. Following observation, they will provide their report to your assessor.

Once your assessor receives your submitted material, and any observation report, they will:

- assess the submitted material
- determine if any further evidence is required
- discuss your workplace skills with the person/s providing any third party report (if necessary)
- contact you to confirm arrangements for any skills observation (if they are completing the observation)
- contact you to arrange a mutually convenient time to call you, if required, to:
 - confirm your understanding
 - o discuss the reports/documents/video/s you submitted
 - o ask any other questions to confirm your competence.
- record your results and provide feedback on the assessment recording form
- return the kit to the NMI Administrator for processing and confirmation of the result of your assessment by email, and posting out your statement of attainment, when successful.

Assessment recording form (applicant)

Applicant to complete this section Name: **First** Middle **Family Email address:** Telephone: Work **Mobile** Name of any third party providing a report: Third party's telephone number: Third party's email address: Company name: Check the licensing subclass/es of instruments you are being assessed for: 6.7 Automatic packaging conveyor weighers 6.8 Wheeled loader weighing instruments (Automatic catchweighing instruments class Y(b)) 18.2 Point of sale systems Checklist to ensure you have included all required components of this kit. Check all that apply: Applicant's work history Third party report/s Written assessment (all subclasses) Written assessment (6.7 specific) Written assessment (6.8 specific) Written assessment (18.2 specific) Completed verification form/s for subclasses: 6.7 – Automatic packaging conveyor weighers 6.8 - Wheeled loader weighing instruments 18.2 - Point of sale systems Test reports from tests you have completed in the workplace (Check all relevant to the subclasses you wish to be assessed for): 6.7 – Automatic packaging conveyor weighers 18.2 - Point of Sale systems 6.8 - Wheeled loader weighing instruments Printed documents from POS testing (18.2 only) Applicant declaration: I verify that I personally completed all the work and activities related to, and submitted as part of, this kit - without assistance. (Complete declaration when you are ready to submit the kit) Name: Date submitted:

Applicant's work history and training **Details of current employment** Organisation: Postal address: Date employment started: Date training related to these subclasses started: Title of your current position: **Details of previous relevant employment** Organisation: Postal address: Period of employment: From: To: Title of your previous position: Relevant work experience Specify the length of time you have been testing each subclass of instrument, the type of instruments you have worked with, and the approximate number of instruments you have tested (including under supervision and in simulated workplace situations) Detail any relevant training courses you have attended (name and date) and attach copies of any relevant trade qualifications:

Assessment recording form (assessor) Assessor to complete this section. **Applicant** Date kit received: Assessor name: Summary of evidence used to assess the applicant: Written assessments Completed verification form task/s Third party reports Conversation with applicant Review of test reports/transaction records Skills observation/report/review of videos Other - specify: To obtain the skill set MSMSS00009 - Trade Measurement Verification (Limited Weighing Instrument), applicants must demonstrate competence in both units of competency. This applicant was assessed as: Competent Not yet competent MSMTMVER401 Verify weighing instruments MSMTMREF301 Use and maintain reference standards Separate unit of competency MSMTMVER302 Verify simple measuring instruments for POS systems Competent Not yet competent MSMTMVER302 Verify simple measuring instruments Check whether they are satisfactory or not yet satisfactory for each subclass requested: **Satisfactory** Not yet satisfactory 6.7 - Automatic packaging conveyor weighers 6.8 - Wheeled loader weighing instruments (Automatic catchweighing instruments class Y(b)) 18.2- Point of sale systems (POS systems) Applicant's ID checked at interview: Assessor's name: Date: **RTO Manager's signature:** Date:

Assessor's feedback form

Assessor: Please include feedback to the applicant here and add your name and the form. Particularly where you have assessed the applicant as NYC, ensure you assessment requirements the applicant has not yet demonstrated (e.g. Performs the unit of competency (UoC) MSMTMREF301 - Use and maintain reference stayou were unable to correctly validate the reference standard suitability).	ou identify which ance criteria (PC) 2.4 of
Assessor's name:	Date:
ASSESSOL S HALLE.	Date.

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Instructions for all written assessments

You must complete the 'all subclasses questions'

In addition, complete all questions relating to the specific subclasses you wish to verify.

For multiple choice questions, check the correct answer, or answers. If you make a mistake, you can simply uncheck the box/es and check the new correct box/es.

For free text questions, type in the text box provided below each question. Include any calculations you use. The text box shouldn't limit how much you can write, but the size of the box indicates the expected maximum length of your answer.

If you have any problems writing your calculations in the text box, write them on a separate document, referencing the question they relate to (e.g. Subclass 6.7 Q6), then scan or photograph them and email along with your kit.

Name the added document RK 6.7, 6.8 & 18.2 F V3.0 Calculations Joe Smith

Written assessment 'all subclasses'

If you are completing more than one recognition kit at the same time, you only need to answer these 'all subclasses' questions once.

1.	In your own words, describe:		
	a) what a hazard is.		
		Correct	Incorrect
	b) what a risk is.		

List four basic duties you have under the safety legislation in your state or territory, as an employee or worker.

Satisfactory Incomplete Incorrect

Correct

Incorrect

3. List the main workplace health and safety hazards that you face when verifying measuring instruments or measures. Your answer should relate to the environments and method/s of verification for instruments/measures for which you are currently being assessed. Write your answer below. Include at least 5 common hazards (add another 5 per additional kit you are completing at the same time). In addition, identify the main controls you apply to ensure your safety, and list any specific workplace procedure that applies to the hazard.

Hazards	Controls	Workplace procedures
1.		
2.		
3.		
4.		
5.		
1.		
2.		
3.		
4.		
5.		
1.		
2.		
3.		
4.		
5.		

4. Do you know what a SDS and a SWMS are? a) Explain what a SDS is: Correct Incorrect b) Give an example of when you would use a SDS: Correct Incorrect c) Explain what a SWMS is: Correct Incorrect d) Give an example of when you would use a SWMS: Correct Incorrect 5. As part of the licence conditions, a servicing licensee is required to maintain a quality management system. From the following list, select each item that is included in your quality management system manual. Check all that apply. a) The requirement for all measuring instruments/measures to be of an approved pattern and comply with their certificate of approval. b) Details of mandatory reverification periods for instruments/measures used for trade. c) References to the national instrument test procedures relevant to the servicing licence. d) Procedures relating to instruments/measures that cannot be verified. Satisfactory Incomplete Incorrect 6. Which document, maintained by the servicing licensee, details the required format of the mark that verifiers, working under that servicing licence, must apply to show an instrument/measure has been verified? Choose the single correct answer. a) The National Trade Measurement Regulations 2009. b) The licensee's quality manual. The National Instrument Test Procedures. c) d) The licensee's servicing licence. Incorrect Correct 7. You have just changed your home address. What are you required to do? Choose the single correct answer.

c) Notify my employer who will notify NMI within 14 days.

Notify my employer who will notify NMI within 2 months.

d) Call my local trade measurement inspector and leave a message.

Correct Incorrect

a)

b)

Nothing.

8.	If you verify a measuring instrument/measure, how long do you have to submit notice of the verification to the National Measurement Institute on the approved form? Choose the single correct answer.				
	a)	7 days			
	b)	14 days			
	c)	21 days			
	d)	1 month			
				Correct	Incorrect
9.		the actions you would take when you test a measuring in etermine that you cannot verify it. Check all that apply.	nstrument/meas	sure in use for tra	ade and
	a)	Replace the verification mark with one indicating the instor trade.	trument/measu	re can no longer	be used
	b)	Remove any existing verification mark (where feasible).			
	c)	Notify the owner within 14 days.			
	d)	Notify the owner immediately.			
	e)	Notify NMI within 14 days			
	f)	Notify NMI immediately.			
			Satisfactory	Incomplete	Incorrect
10.		could be the consequence if you failed to provide the traceve been unable to verify a measuring instrument/measuring instrument/measuring instrument/measuring instrument/measuring instrument/measuring instrument/measuring			
	a)	No consequence provided I told the trader they couldn't	use the instrun	nent/measure fo	r trade.
b) Customers could get incorrect measure.					
	c)	Nothing, it's the trader's responsibility to check the instr	ument/measure	is correctly mar	ked.
	d) I could be fined.				
	e)	I could be restricted from verifying instruments/measure	es.		
			Satisfactory	Incomplete	Incorrect
11.	any ot	were unsure of the correct way to apply a verification ma her requirement relating to the verification process, what e at least three points.			
			Satisfactory	Incomplete	Incorrect

- 12. How often must a measuring instrument/measure used for trade (excluding weighbridges used for public weighing) be re-verified? Choose the single correct answer.

 a) Every 3 years.

 b) Every 5 years.

 c) Whenever it has been adjusted/repaired or every 2 years.

 d) Whenever an adjustment or repair affects its metrological performance.

 Correct Incorrect
- 13. Can you verify a measuring instrument/measure where its certificate of approval states 'cancelled in respect of new instruments as from 1 January 2014'? Choose the single correct answer.
 - a) No, never.
 - b) Yes, always.
 - c) Yes, if the instrument/measure was manufactured before 1 January 2014.
 - d) Yes, provided the instrument is new.

Correct Incorrect

- 14. What markings would you apply to an instrument/measure you verified on 26 May 2020 if your servicing licensee code is DBA and you have the verifier number VR 01278? Choose the single correct answer.
 - a) DBA 1278 B0
 - b) 1278 B 20
 - c) DBA 1278 E20
 - d) DBA 1278 E0
 - e) 1278 DBA B20

Correct Incorrect

- 15. The following questions relate to the connection of auxiliary devices to measuring equipment.
 - a) Which document specifies the requirements for the installation of auxiliary indicating or printing devices and POS systems installed prior to 1 August 2012? Choose the single correct answer.
 - i. S1/0/A
 - ii. S1/0B
 - iii. Supplementary certificate of approval for the device/system
 - iv. Measuring instrument approval

Correct Incorrect

- b) Which document specifies the requirements for the installation of auxiliary indicating or printing devices installed after 1 August 2012, excluding POS or Control systems? Choose the single correct answer.
 - i. S1/0/A
 - ii. S1/0B
 - iii. Supplementary certificate of approval for the device/system
 - iv. Measuring instrument approval

Correct Incorrect

	c)	 c) Which document specifies the requirements for the installation of POS systems installed after 1 August 2012? Choose the single correct answer. i. S1/0/A 			ed after 1	
		ii.	S1/0B			
		iii.	Supplementary certificate of approval for the de	evice/system		
		iv.	Measuring instrument approval			
					Correct	Incorrect
	d)	systen	verifying an instrument which has an auxiliary d n) connected to it, what are the requirements for et answer. Apply a mark to the instrument only			
		ii.	Apply a mark to the auxiliary device only			
		iii.	Apply a mark to both the auxiliary device and the	ne instrument		
					Correct	Incorrect
	perform	nance.	(Give two examples per instrument type you are	e being assesse	d for at this time	e).
				Satisfactory	Incomplete	Incorrect
17.	In your points.	organi	sation, how do you maintain records relating to v	verification? Yo	u should include	at least 2
				Satisfactory	Incomplete	Incorrect
18.			ify instruments/measures, what are the principal completing a verification? Include at least 3 poin			ness and
				Satisfactory	Incomplete	Incorrect

The questions listed below apply specifically to the knowledge requirements for the unit o
competency MSMTMREF301 - Use and maintain reference standards.

19. List the **reference standards/test equipment** you use when verifying measuring instruments or measures. (Include capacity ranges, scale intervals and class/es, where appropriate) The answer you give should relate to **all** instrument subclasses for which you are being assessed. Write your answer below.

Satisfactory Incomplete Incorrect

20. How do you protect the integrity of the **reference standards and test equipment** you described in the previous question? Your answer should relate to storage, transportation and handling of reference standards and equipment. Write your answer below. Include **at least four** points.

Satisfactory Incomplete Incorrect

21. This question relates to the reference standards/test equipment you use, not the instrument/measure being tested.

What environmental factors could influence the integrity of the **reference standards and test equipment** that you use when verifying instruments/measures? The answer you give should relate to any instrument subclasses for which you are being assessed. Check **all** that apply.

- b) Humidity
- c) Electrical interference
- d) Wind/air movement
- e) Rain/water
- f) Gravity
- g) Dust/dirt
- h) Instrument level
- i) Pressure
- j) Vibration
- k) Other (detail):

Satisfactory Incomplete Incorrect

22. How do you control these factors when undertaking a verification? The answer you give should relate to the standards/equipment for all subclasses for which you are being assessed. Write your answer below. You should include **at least one** control per item selected above.

Satisfactory Incomplete Incorrect

- 23. You have damaged a reference standard used to verify measuring instruments/measures. What should you do with it? Choose the single correct answer.
 - a) Fix the damage
 - b) Quarantine it, until it has been repaired, tested and approved for use by the appropriate authority.
 - c) Use it until it can be repaired.
 - d) Quarantine it and then use it once repaired, if it is repairable.

Correct Incorrect

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24.	you to a pe each of the subclass/e	ng reference standards/test equipment, what signs/sossible problem/fault/damage with those standards, e types of standards or equipment you use when very outlier as you are being assessed for. Include at least two est equipment you use.	/test equipment? erifying instrume	Provide answents/measures of	rs for the
			Satisfactory	Incomplete	Incorrect
25.	standard/t	verified and marked a measuring instrument/measuest equipment used for the verification is damaged fied instrument/measure? Write your answer below	or faulty. What s	should you do wi	
			Satisfactory	Incomplete	Incorrect
26.	26. What does your quality management system require your organisation to do when there is a change to the reference standards/test equipment you use, i.e. when you acquire new standards/test equipment, when your standards/test equipment are re-verified, when you dispose of standards/test equipment the are broken/excess to requirements? Check all that apply.				uipment,
	a)	Ensure that new standards/test equipment have the	he appropriate c	ertification.	
	b)	Allocate a junior member of staff to clean the new	standards/test e	equipment.	
	c)	Update the list of reference standards/test equipm	nent.		
	d)	Supply a copy of the updated list of reference star	ndards/test equip	ment to NMI wit	hin
		30 days of the change.			
	e)	Supply a copy of the updated list of reference star	ndards/test equip	ment to NMI wit	hin
		14 days.			
			Satisfactory	Incomplete	Incorrect
27.		e principal purpose of a certificate of verification (er answer below	.g. a Reg. 13 ce	rtificate)?	
			Satisfactory	Incomplete	Incorrect

28. What procedures does your business need in place for maintenance and calibration of your re standards/test equipment? Refer to your quality manual. Write your answer below. Include at points.					
			Satisfactory	Incomplete	Incorrect
29.	related t	identify any limitations of the reference standards/tes o the verification or the environment in which they are e standards/test equipment you may use for the subc cribing the limitations and how significant they might b	used? Address lasses you are	this question to	all
			Satisfactory	Incomplete	Incorrect
30.		could you find the legal units of measurement for Aust	ralia? Choose a	any that	
	apply.	On the NIMI intermet was a			
	a)	On the NMI internet pages.			
	b)	In the National Measurement Act 1960			
	c)	In the National Measurement Regulations1999.			
	d)	In the licensee's quality manual			
				Correct	Incorrect
31.		esponsible for determining whether a particular mode Australia?	l of instrument of	can legally be us	ed for
				Correct	Incorrect
32.	What ar	e organisations who are authorised to verify reference	standard weig	nts called?	
				Correct	Incorrect
33.	instrume	or instruments/measures may be given in a number of ent/measure you are to verify was first approved on the correct MPE to use during testing?			ıld you
				Correct	Incorrect

Written assessment (Subclass 6.7 specific questions)

Complete this section if you are being assessed for automatic packaging conveyor weighers

1.			er of the instru 170 mm? Choo				r 6/14G/15 has a	belt
	a)	Hi-700						
	b)	WI-700						
	c)	HI-700 S	SF					
	d)	MI-700						
							Correct	Incorrect
2.		you under the differer		difference be	tween the te	rms weight an	d mass? Provide	an example
							Correct	Incorrect
3.	Consider relate to		ation 13 certific	cate of verifica	ation that follo	ows and answ	er the following q	uestions that
	a) W	hat is the u	ıncertainty for t	the 2kg referer	nce standard	s? Choose the	e single correct a	nswer.
		i.	± 0.002 0 g	J				
		ii.	0.002 g					
		iii.	-0.005 g					
		iv.	± 0.006 g					
							Correct	Incorrect
	b) W	hat verifica	ation method wa	as used for the	ese reference	e standards? \	Write your answe	r below.
	o) \//	hat is the c	otual valua for	the 10 mg ref	oronoo stond	lord? Chassa	Correct the single correct	Incorrect
	C) VV	i.	10 mg	the rolling ren	erence stand	iaiu: Ciloose	the single correct	answer.
		ii.	0.010 014 g	n				
		iii.	0.009 996 g	_				
		iv.	0.009 990 g	-				
		IV.	0.010 000 9	1				
							Correct	Incorrect



National Measurement Institute

Certificate of Verification of a Reference Standard of Measurement in accordance with Regulation 13 of the National Measurement Regulations 1999 (Cth) in accordance with the National Measurement Act 1960 (Cth)

Certificate Number RN200474

Description of standard of measurement: Set of stainless steel weights

5 kg to 1 mg, 28 pieces

Permanent distinguishing marks: Contained in box marked 83616

Date of verification: 13 March 2020

Period of certificate: From date of verification until 13 March 2022

Value(s) of standard of measurement: As stated in Report RN200474 of the National

Measurement Institute

Accuracy of verification: Uncertainty of value(s) as stated in Report

RN200474 of the National Measurement Institute

Date: 24 March 2020

Values and uncertainties of relevant influence factors:

As stated in Report RN200474 of the National

Measurement Institute

Signature: J. J. Buchaly

Name of Signatory: Mr Greg Buckley

Being a person with powers delegated by the Chief Metrologist acting under section 18D of the National Measurement Act 1960 (Cth) in respect of regulation 13 of the National Measurement Regulations 1999 (Cth), I hereby certify that the above standard is verified as a reference standard of measurement in accordance with the regulations.

Note: Report RN200474 of the National Measurement Institute forms part of this Certificate.



National Measurement Institute

MEASUREMENT REPORT ON

Set of stainless steel weights 5 kg to 1 mg, 28 pieces

Serial number: Contained in box marked 83616



Accredited for compliance with ISO/IEC 17025 - Calibration Accreditation Number 1.

The National Measurement Institute is responsible for Australia's units and standards of measurement. The measurement results presented in this report are traceable to Australia's primary standards.

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Ref. RN200474

File: CB/12/1378

Checked:

63

Date: 16 March 2020

This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing from the Chief Metrologist, National Measurement Institute. For:

National Measurement Institute

Trade Measurement Services, Brisbane

33 Kingtel Place

GEEBUNG QLD 4034

Description:

Set of stainless steel weights, 5 kg to 1 mg, 28 pieces

Maker:

Masscal

Serial Number:

Contained in box marked 83616

Previous Examination:

RN172063 dated 31 October 2017

Date(s) of Test:

12 March 2020 to 13 March 2020

Results of measurement:

Table 1 - Weights contained in wooden box marked 83616

Nominal Mass	Description	Identifying Mark(s)	Measured Mass (g)	Uncertainty (±g)	Coverage Factor (k)
5 kg	stainless steel cylindrical weight	Н	4 999.988	0.005	2.0
2 kg	stainless steel cylindrical weight	Н	2 000.005 2	0.002 0	2.0
2 kg*	stainless steel cylindrical weight	Н	2 000.003 8	0.002 0	2.0
1 kg	stainless steel cylindrical weight	Н	1 000.002 9	0.001 0	2.0
500 g	stainless steel cylindrical weight	Н	500.001 3	0.000 5	2.0
200 g	stainless steel cylindrical weight	Н	200.000 34	0.000 20	2.0
200 g*	stainless steel cylindrical weight	Н	200.000 08	0.000 20	2.0

Ref: RN200474 File: CB/12/1378 Checked: Date: 16 March 2020

Table 2 - Weights contained in plastic box marked 83616

Nominal Mass	Description	Identifying Mark(s)	Measured Mass (g)	Uncertainty (±g)	Coverage Factor (k)
100 g	stainless steel cylindrical weight	Н	99.999 84	0.000 10	2.0
50 g	stainless steel cylindrical weight	Н	50.000 12	0.000 05	2.1
20 g	stainless steel cylindrical weight	Н	19.999 979	0.000 040	2.1
10 g	stainless steel cylindrical weight	Н	10.000 047	0.000 020	2.2
10 g*	stainless steel cylindrical weight	Н	10.000 030	0.000 020	2.2
5 g	stainless steel cylindrical weight		5.000 004	0.000 015	2.1
2 g	stainless steel cylindrical weight		2.000 061	0.000 010	2.1
2 g*	stainless steel cylindrical weight		2.000 043	0.000 010	2.1
1 g	stainless steel cylindrical weight		0.999 984	0.000 010	2.0
500 mg	stainless steel wire weight		0.500 000	0.000 010	2.1
200 mg	stainless steel wire (S/B) weight		0.200 053	0.000 005	2.0
200 mg	stainless steel wire (D/B) weight		0.200 029	0.000 005	2.0
100 mg	stainless steel wire weight		0.100 049	0.000 005	2.0
50 mg	stainless steel wire weight		0.050 011	0.000 005	2.0
20 mg	stainless steel wire (S/B) weight		0.020 004	0.000 005	2.0
20 mg	stainless steel wire (D/B) weight		0.020 019	0.000 005	2.0
10 mg	stainless steel wire weight		0.010 014	0.000 003	2.0
5 mg	stainless steel wire weight		0.005 011	0.000 003	2.0
2 mg	stainless steel wire (S/B) weight		0.002 008	0.000 003	2.0
2 mg	stainless steel wire (D/B) weight		0.002 000	0.000 003	2.0
1 mg	stainless steel wire weight		0.001 018	0.000 003	2.0

Ref: RN200474 File: CB/12/1378 Checked: \$\infty\$ Date: 16 March 2020

4. You are using a 15 kg x 0.005 kg scale interval Teraoka Shanghai Model Digi DS-671 class 3 weighing instrument (certificate of approval 6/4D/299) minimum capacity 100 g, as a control instrument. You get the following results for the weighing performance test. Determine whether the instrument is suitable to be used as a control instrument by stating whether the instrument is within MPE at each load applied. If you feel that you have insufficient information to determine whether the instrument is correct or not, check 'unsure'.

Load applied	Indicated Load	Pass/Fail/Unsure
100 g	0.100 kg	
2.5 kg	2.495 kg	
5 kg	4.995 kg	
10 kg	10.000 kg	
15 kg	14.995 kg	

Satisfactory Incomplete Incorrect

- 5. Which of the following are some of the criteria for the selection of test objects? Check all that apply.
 - a. Must span from minimum to maximum in approximate equal steps
 - b. Must have a value of 2/3 max for eccentricity and weighing performance
 - c. Must be in denominations of 1 kg
 - d. Must include masses at MPE change points
 - e. At least 10 objects must be used

Satisfactory Incomplete Incorrect

- 6. This question relates to a 3/6 kg * 0.001/0.002 kg multi-interval class Y(a) automatic package weigher. Minimum capacity 0.1 kg. What are the requirements for a control instrument suitable for determining the mass of test packages used to test this instrument? Check all that apply.
 - a. Have a maximum MPE of $\pm 1/3$.
 - b. Must be at least three times more accurate than the package weigher under test.
 - c. Have a maximum MPE of \pm 0.5 e.
 - d. Capable of having standard weights deposited on the load receptor.
 - e. Have a maximum capacity at least three times greater than the package weigher under test.
 - f. Have been tested within 7 days of testing the package weigher dynamically.
 - g. Have a max capacity equal to or greater than the weight of the heaviest load + 10%.
 - h. Must be a non-automatic weighing instrument or package weigher operating in static mode.
 - Be of an approved pattern or have an approved load cell and indicator which meets the requirements of 6B/0.

Satisfactory Incomplete Incorrect

7. Are Pounds and ounces legal units of measurement in Australia?

Yes No

Correct Incorrect

- 8. You have statements of attainment in subclasses 6.1-6.3 and 18.2. You haven't yet completed your statement of attainment for 6.7, despite having worked on such instruments for a number of years. Your manager asks you to go and repair and verify an automatic package weigher that has just broken down at a major food packer your company holds a servicing contract with, as the usual verifier is off sick. What should you do? Choose the single correct answer.
 - a. Repair and verify the instrument.
 - b. Verify the instrument using the usual verifier's number.
 - c. Tell your employer that you are not competent to verify it.
 - d. Repair the instrument and leave without verifying it; the customer will know not to use an instrument without a verification mark.

Correct Incorrect

9. You have been carrying out an annual accuracy check at a factory that has a number of catchweighers, and you notice they all seem to have the same slow error (indicated weight less than applied load). What might be the reason for this and what should you do?

Satisfactory Incomplete Incorrect

- 10. You are carrying out some routine accuracy checks of catchweighers used to weigh and label packaged food. You notice that the pack weight being marked is inclusive of the weight of the packaging (Packaged articles must be marked with the weight of product only). The instrument has a PLU facility which enables a pre-set tare value to be recorded and subtracted from the weight of the package to ensure a correct marked weight. Instrument approval number 6/14G/20. What do you do? Check all appropriate answers.
 - a. Nothing, it isn't your problem.
 - b. Remove the mark, as the instrument no longer meets the requirements for verification.
 - Speak to the controller and advise him about the provision for including pre-set tares within the PLU, assisting him on how to set it up, if required.
 - d. Issue a non-compliance notice
 - e. Tell the controller of the site that the company may be in breach of trade measurement legislation if allowance is not made for the weight of the packaging when marking the weight on packs.

Satisfactory Incomplete Incorrect

	premises i		igher that has been installed in their frozen food pack ntained at -12°C. The instrument approval provides a – 40°C. What would you do in this situation?		
10	Which of the	ne following would trigger the need to re-verify a	Satisfactory	Incomplete	Incorrect
12.	a. b.	Replacement of a worn data plate Calibration adjustment of instrument	a package weigi	ier : Check all th	ат арргу.
	c. d.	Replacement of a load cell. Repair to missing segments of the digital indication of the digital indication.	ator		
10	e.	All of the above	Satisfactory	Incomplete	Incorrect
13.		the principal metrological components of an aucribe their function.	nomanc packagi	ng conveyor we	gner? –
		Component	Fund	ction	
			Satisfactory	Incomplete	Incorrect

Written assessment (Subclass 6.8 questions)

Complete ONLY if you are being assessed for this subclass

- 1. Which model number of the instrument approved in certificate NMI number 6/20A/3 can have up to 350 scale intervals? Choose the single correct answer.
 - a) LR916
 - b) L-2180
 - c) LR918
 - d) LR917

Correct Incorrect

2. Are tons legal units of measurement in Australia?

Yes No

Correct Incorrect

3. ANSWER THIS QUESTION ONLY IF YOU HAVE NOT ANSWERED IT FOR SUBCLASS 6.7 ABOVE.

What do you understand to be the difference between the terms weight and mass? Provide an example to show the difference.

Correct Incorrect

4. ANSWER THIS QUESTION ONLY IF YOU HAVE NOT ANSWERED IT FOR SUBCLASS 6.7 ABOVE.

Consider the Regulation 13 certificate of verification that follows and answer the following questions that relate to it.

- a) What is the uncertainty for the 2kg reference standards? Choose the single correct answer.
 - i. $\pm 0.0020 g$
 - ii. 0.002 g
 - iii. -0.005 g
 - iv. $\pm 0.006 \, g$

Correct Incorrect

b) What verification method was used for these reference standards? Write your answer below.

Correct Incorrect

- c) What is the actual value for the 10 mg reference standard? Choose the single correct answer.
 - i. 10 mg
 - ii. 0.010 014 g
 - iii. 0.009 996 g
 - iv. 0.010 000 g

Correct Incorrect



National Measurement Institute

Certificate of Verification of a Reference Standard of Measurement in accordance with Regulation 13 of the National Measurement Regulations 1999 (Cth) in accordance with the National Measurement Act 1960 (Cth)

Certificate Number RN200474

Description of standard of measurement: Set of stainless steel weights

5 kg to 1 mg, 28 pieces

Permanent distinguishing marks: Contained in box marked 83616

Date of verification: 13 March 2020

Period of certificate: From date of verification until 13 March 2022

Value(s) of standard of measurement: As stated in Report RN200474 of the National

Measurement Institute

Accuracy of verification: Uncertainty of value(s) as stated in Report

RN200474 of the National Measurement Institute

Date: 24 March 2020

Values and uncertainties of relevant influence factors:

As stated in Report RN200474 of the National

Measurement Institute

Signature: J. J. Burholy

Name of Signatory: Mr Greg Buckley

Being a person with powers delegated by the Chief Metrologist acting under section 18D of the National Measurement Act 1960 (Cth) in respect of regulation 13 of the National Measurement Regulations 1999 (Cth), I hereby certify that the above standard is verified as a reference standard of measurement in accordance with the regulations.

Note: Report RN200474 of the National Measurement Institute forms part of this Certificate.



National Measurement Institute

MEASUREMENT REPORT ON

Set of stainless steel weights 5 kg to 1 mg, 28 pieces

Serial number: Contained in box marked 83616



Accredited for compliance with ISO/IEC 17025 - Calibration Accreditation Number 1.

The National Measurement Institute is responsible for Australia's units and standards of measurement. The measurement results presented in this report are traceable to Australia's primary standards.

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Ref: RN200474

File: CB/12/1378

Checked:



Date: 16 March 2020

This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing from the Chief Metrologist, National Measurement Institute.

For:

National Measurement Institute

Trade Measurement Services, Brisbane

33 Kingtel Place

GEEBUNG QLD 4034

Description:

Set of stainless steel weights, 5 kg to 1 mg, 28 pieces

Maker:

Masscal

Serial Number:

Contained in box marked 83616

Previous Examination:

RN172063 dated 31 October 2017

Date(s) of Test:

12 March 2020 to 13 March 2020

Results of measurement:

Table 1 - Weights contained in wooden box marked 83616

Nominal Mass	Description	Identifying Mark(s)	Measured Mass (g)	Uncertainty (±g)	Coverage Factor (k)
5 kg	stainless steel cylindrical weight	Н	4 999.988	0.005	2.0
2 kg	stainless steel cylindrical weight	Н	2 000.005 2	0.002 0	2.0
2 kg*	stainless steel cylindrical weight	Н	2 000.003 8	0.002 0	2.0
1 kg	stainless steel cylindrical weight	Н	1 000.002 9	0.001 0	2.0
500 g	stainless steel cylindrical weight	Н	500.0013	0.000 5	2.0
200 g	stainless steel cylindrical weight	Н	200.000 34	0.000 20	2.0
200 g*	stainless steel cylindrical weight	Н	200.000 08	0.000 20	2.0

Ref: RN200474 Fil

File: CB/12/1378

Checked:

33

Date: 16 March 2020

Table 2 - Weights contained in plastic box marked 83616

Nominal Mass	Description	Identifying Mark(s)	Measured Mass (g)	Uncertainty (±g)	Coverage Factor (k)
100 g	stainless steel cylindrical weight	Н	99.999 84	0.000 10	2.0
50 g	stainless steel cylindrical weight	H	50.000 12	0.000 05	2.1
20 g	stainless steel cylindrical weight	Н	19.999 979	0.000 040	2.1
10 g	stainless steel cylindrical weight	Н	10.000 047	0.000 020	2.2
10 g*	stainless steel cylindrical weight	Н	10.000 030	0.000 020	2.2
5 g	stainless steel cylindrical weight		5.000 004	0.000 015	2.1
2 g	stainless steel cylindrical weight		2.000 061	0.000 010	2.1
2 g*	stainless steel cylindrical weight		2.000 043	0.000 010	2.1
1 g	stainless steel cylindrical weight		0.999 984	0.000 010	2.0
500 mg	stainless steel wire weight		0.500 000	0.000 010	2.1
200 mg	stainless steel wire (S/B) weight		0.200 053	0.000 005	2.0
200 mg	stainless steel wire (D/B) weight		0.200 029	0.000 005	2.0
100 mg	stainless steel wire weight		0.100 049	0.000 005	2.0
50 mg	stainless steel wire weight		0.050 011	0.000 005	2.0
20 mg	stainless steel wire (S/B) weight		0.020 004	0.000 005	2.0
20 mg	stainless steel wire (D/B) weight		0.020 019	0.000 005	2.0
10 mg	stainless steel wire weight		0.010 014	0.000 003	2.0
5 mg	stainless steel wire weight		0.005 011	0.000 003	2.0
2 mg	stainless steel wire (S/B) weight		0.002 008	0.000 003	2.0
2 mg	stainless steel wire (D/B) weight		0.002 000	0.000 003	2.0
1 mg	stainless steel wire weight		0.001 018	0.000 003	2.0

Ref: RN200474 File: CB/12/1378 Checked: Date: 16 March 2020

- 5. What is the required accuracy for **nominal value** reference standard weights used to test measuring instruments in relation to the MPE for the test load? Choose the single correct answer.
 - a) One third of MPE of the load applied.
 - b) Two thirds of max capacity.
 - c) Combined uncertainties of the weights used must not be more than one third of the MPE of the load applied.
 - d) Combined uncertainties and variations of the weights used must not be greater than one third of the MPE for the instrument at the load applied.

Correct Incorrect

- 6. What is the purpose of a control instrument? Choose **all** that apply.
 - a) To check the reference weights are correct.
 - b) To determine the weight of loads measured on the wheeled loader.
 - c) To determine the weight of test objects used in testing of a wheeled loader.
 - d) To control the speed of lift of the wheeled loader

Satisfactory Incomplete Incorrect

7. What weights/weight sets would you need for testing a 14 999 kg x 5 kg scale interval Brisweigh Model CJB-3000 class 3 platform weighing instrument (certificate of approval 6/9C/269), minimum capacity 100 kg, that is to be used as a control instrument. List all that are required if the maximum load to be applied to the control instrument during testing of the wheeled loader is 12 500 kg.

Satisfactory Incomplete Incorrect

- 8. Which of the following statements are correct relating to the use of test objects in testing wheeled loaders? Check **all** that apply.
 - a) Test objects made of loose material must be bagged.
 - b) Test objects can include solid blocks of concrete.
 - c) Gravel may not be used to make a test object.
 - Test objects can be determined on any suitable weighing instrument, provided it is verified.
 - e) Control instruments must be tested immediately prior to determining the weight of the test objects.
 - f) The weight of the test objects must be determined within 24 hours prior to testing the wheeled loader.
 - g) The weight of the test objects must be determined within 7 days prior to testing the wheeled loader.
 - h) The weight of the test objects may be determined more than 24 hours prior to testing of the wheeled loader, PROVIDED they are maintained in a secure storage place where the weight of the objects cannot be altered.

Satisfactory Incomplete Incorrect

9. The following question relates to a 12 500 kg capacity class Y(b) automatic catchweighing instrument with a verification scale interval of 50 kg, minimum capacity 500 kg.

There are certain characteristics that apply to a control instrument used for determining the weight of test objects used to test a wheeled loader? From the following statements, choose **all** that are correct statements about the control instrument.

- a) The applicable MPEs for the control instrument are those based on the accuracy class and verification scale interval of the instrument at each load applied.
- b) The control instrument must have a maximum MPE of \pm 1/3 of the wheeled loader for the corresponding mass.
- c) The control instrument must have a maximum MPE of \pm 1/6 of the wheeled loader for the corresponding mass.
- d) Be capable of having standard weights deposited on the load receptor
- e) Have a maximum capacity at least three times greater than the wheeled loader under test
- f) Have a maximum capacity at least equal to the weight of the heaviest test object.
- g) Have been tested within 7 days prior to testing the wheeled loader.
- h) Have been tested within 24 hours prior to testing the wheeled loader
- i) Be a non-automatic weighing instrument
- j) Be an approved and verified weighing instrument.

Satisfactory Incomplete Incorrect

10. What is the purpose of a tilting test?

Correct Incorrect

- 11. For a wheeled loader fitted with a printer, what error is permitted between the printed weight indication and the indicated weight indication?
 - a) $\pm 0 e$
 - b) $\pm 1.5 e$
 - c) ± 2 e
 - d) $\pm 2.5 e$

Correct Incorrect

- 12. Which of the following repairs would you trigger the requirement for a wheeled loader weighing instrument to be reverified? Check all/any that apply.
 - a) Replacement of a worn data plate.
 - b) Calibration adjustment for instrument outside MPE on eccentricity test.
 - c) Replacement of unreadable display
 - d) Replacement with same model printer
 - e) Replacement of level sensor

Correct Incorrect

13. For the following zero setting test results, using loads of 0.25 e and 0.75 e, do the following results in each case indicate the instrument has passed or failed the test? (Note: Instruments do not have zero tracking)

a) **Applied Load** Result **Applied Load** Result **Correct Y/N** 0.25 e 0 0.75 e 1 e 0.25 e 0.75 e 0 1 e 0.25 e 0 0.75 e 0 0.25 e 1 e 0.75 e 0 0.25 e 0.75 e 1 e 1 e

Correct Incorrect

b)

,				
Applied Load	Result	Applied Load	Result	Correct Y/N
0.25 e	0	0.75 e	1 e	
0.25 e	0	0.75 e	1 e	
0.25 e	0	0.75 e	1 e	
0.25 e	1 e	0.75 e	0	
0.25 e	1 e	0.75 e	- 1e	

Correct Incorrect

c) Provide an explanation for the answers you gave above.

Satisfactory Incomplete Incorrect

14. On a routine visit to a customer who uses the Accuonboard Binweigh (NMI 6/20A/7) to charge for trade waste they collect from its customers you are told that, to save time, the drivers are only weighing the bins full, rather than full and empty. The customer is charged for the net waste collected after a standard bin tare weight figure is deducted from the gross weight. The standard bin tare weight is an average of previously weighed tare weights.

Provide comments as to whether this practice is acceptable or not, giving your reasoning. What advice might you give to your customer?

14. Name 5 of the principal metrological components of a wheeled loader weighing instrument? – Briefly describe their function.

Component	Function

Satisfactory Incomplete Incorrect

- 15. You have recently been employed by a licensee who holds a licence for instruments of licence subclasses 6.1, 6.4, 6.7 and 13.1. You have a statement of attainment for instruments of subclasses 6.4 and 6.8 and about 10 years ago you used to repair and verify automatic packaging conveyor weighers (class Y(a) instruments subclass 6.7). Your employer has just received a call out from a valued customer, with whom he has a maintenance contract, to repair an automatic packaging weigher that has been rejected by a trade measurement officer. His usual verifier of these instruments is on leave for a week, so he asks you to go and repair and re-verify the instrument. What should you do? Check **all/any** that apply.
 - a) Verify the instrument.
 - b) Verify the instrument, using the other verifier's verification number.
 - c) Tell your employer that although you are happy to repair the instrument, you won't be able to verify it.
 - d) Repair the instrument and leave without verifying it, providing no explanation to the customer.
 - e) Tell your employer to do it himself.

Satisfactory Incomplete Incorrect

16. Every three months, you carry out accuracy checks at a council site for a number of wheeled loaders used for weighing collected commercial waste. On this occasion, you notice they all seem to have the same slow error (indicated weight less than applied load). What might be the reason for this and what should you do?

- 17. A wheeled loader weighing instrument, of the front-end loader type, was verified with a compact loader GP bucket. When you are visiting the site to address a printer problem with the instrument, you notice the instrument is now being used for trade with a compact 4-in-one bucket. What should you do? Check **all** appropriate answers.
 - a) Nothing, the type of bucket shouldn't make any difference as long as it reads zero when empty.
 - b) Remove the mark, as the instrument no longer meets the requirements for verification.
 - c) Tell the controller of the site that the weigher verification only applied to the compact loader GP bucket, and the measurement is likely to be inaccurate.
 - d) Issue the trader with a non-compliance notice.
 - e) Tell the controller the weigher should not be used with the new bucket until it has been verified with the new bucket and it can only then be used with that bucket.
 - f) Repair the damaged printer and leave the site without saying anything.

Written assessment (18.2 – Point of sale systems specific questions)

Complete this section if you are being assessed for point of sale systems.

- 1. What is the name, current version number and release date for the national instrument test procedures used to verify point of sale systems? Choose the single correct answer.
 - a) NITP 6.1-6.4 First edition, second revision January 2014.
 - b) NMI M 7 Pattern Approval Specifications for point of sale systems first edition, first revision June 2012.
 - c) General Supplementary Certificate of Approval No S1/0B updated 18 January 2013.
 - d) NITP 0 First edition February 2015.

Correct Incorrect

- 2. Refer to the supplementary certificate of approval NMI S577. If you were conducting an initial verification of this POS system, are there any additional checks required to ensure the feature described in the fifth dot point of 'Key Features 1.1' complies with its certificate of approval? Choose the single correct answer.
 - a) Inspect the POS to see that it has a tare button.
 - b) Weigh an object and check the POS system display deducts 3 g from the weight displayed on the weighing instrument.
 - c) Program a pre-set tare value into a PLU; weigh an object and check the POS system display deducts the pre-set amount from the weight displayed on the weighing instrument.
 - d) There are no specific checks required for this feature.

Correct Incorrect

- 3. In addition to the NITP, what other document/s specify **tests** required when verifying POS systems? Check **all/any** that are applicable.
 - a) NMI M7.
 - b) Supplementary certificate of approval for the POS system.
 - c) Certificate of approval for the connected instrument.
 - d) Servicing licensee's quality manual.
 - e) NMI S1/0B.

Satisfactory Incomplete Incorrect

4. What documents would you refer to when deciding what equipment and/or items you need to verify a POS system? You should include 2 items in your answer.

Satisfactory Incomplete Incorrect

5. Name one item of test equipment you would need when verifying POS systems.

Correct Incorrect

6. What are the principal components of a POS system? Your answer should include at least **3** components.

Satisfactory Incomplete Incorrect

- 7. Where would you place a verification mark on the POS system approved as supplementary certificate of approval S632? Choose the single correct answer.
 - a) On the weighing instrument to which the POS system is connected.
 - b) On the customer's monitor.
 - c) On the printing device.
 - d) On the POS controller, adjacent to the data plate.
 - e) On both of the two components detailed at c and d above.
 - f) On all the components at a, b, c and d above adjacent to the data plate.

Correct Incorrect

- 8. You have just been employed by a licensee who holds a licence for instruments of licence subclasses 18.2, 6.1, 6.2 and 6.3. You have a statement of attainment for instruments of subclass 6.1 and 6.2 and used to install POS systems about 10 years ago. Your employer asks you to go and install and verify a POS system at a local supermarket to replace a defective system. It is an urgent job and the usual POS system verifier is on leave. What should you do? Choose the single correct answer.
 - a) Install and verify the POS system using your verifier number.
 - b) Install and verify the POS system using the other verifier's verification number.
 - c) Tell your employer that you are not competent to verify the POS system.
 - d) Install the POS system and leave without verifying it, the customer will know not to use it until a verification mark has been applied.

Correct Incorrect

- 9. Which of the following functions can an approved POS system connected to a weighing instrument do? Check **any/all** that apply.
 - a) Calculate the price of a measured item
 - b) Modify the measurement indication on the connected measuring instrument
 - c) Display a weight that has had a pre-set tare subtracted
 - d) Print a total price for a combination of weighed and unweighed items
 - e) Control the authorisation of fuel dispensers.

- 10. Which of the following is an acceptable indication of the net weight of a measured item? Choose the single correct answer.
 - a) 0.125 kg Nett
 - b) 0.125 kg Nt
 - c) 0.125 kg tare
 - d) 0.125 kg Net

Correct Incorrect

11. In your own words, describe the steps you would take to establish that a POS system that allows pre-determined measurement data to be entered manually (e.g. NMI S593) complies with its certificate of approval. Write your answer below.

Satisfactory Incomplete Incorrect

12. Consider the image of a **customer display** shown below. Describe, as dot points, why this display does not meet the requirements for POS system displays. **Be sure to identify ALL issues.**

Note: The height of the characters is 8 mm and the reading distance is 0.9 m.



13. Consider the image of the docket shown below. Describe as dot points how this docket shows that it was produced on a non-compliant POS system? **Be sure to identify ALL issues.**

Note: The smallest font height of the docket is 2 mm.

ABC Supermarket					
Rattle-by Stre	et				
Nimbin, 2480)				
Tel 02 4599 87	799				
Tax Invoice					
ABN 99 998 786	690				
Open 7 days - 6am Midnight	to 12				
Your cashier today-	Harry				
Register 2					
Fountain Coffee 250GM*	3.49				
Pink lady apples	1.04				
0.297 kg @ \$3.50/					
Jane's Melting Moments	200 g*				
	4.99				
Desiree potatoes	3.63				
1.82 kg @ \$1.99					
Freddo Chocolate	1.00				
Subtotal	\$ 14.17				
Rounding	- 0.03				
Total	\$14.20				
EFT	\$14.20				
* is GST item GST	\$0.45				
6/2/21 14:03:42	76897				

14. Consider the image of the label shown below. Describe, as dot points, where this label does not meet the legal requirements for labels printed from a POS system? Be sure to identify ALL issues. (Ignore information relating to date and storage requirements)

Note: The smallest font height on the label is 2 mm.



Satisfactory Incomplete Incorrect

- 15. You are asked to install a weighbridge POS system approval no. NMI S643 into a small open cabin adjacent to a weighbridge at a site that weighs grain in western New South Wales.
 - a) What environmental factors may impact on the POS system? List at least 3 factors below.

Satisfactory Incomplete Incorrect

b) What recommendations would you make to the client about the proposed installation to minimise the impact of those factors?

Satisfactory Incomplete Incorrect

16. During a routine service check of a POS system (NMI S650) at a supermarket, you notice that the format of the printed dockets has changed so that all the printing is now in upper case. Describe what you would do/say to the store manager?

Verification form task

Download a certificate of verification or notice of non-verification of a measuring instrument form (Form 6) from the verifying measuring instruments page of the Industry.gov.au website, **for each task**.

Do not print the form out.

Complete **all required fields** into the **electronic** form <u>using the information given below</u>, including the appropriate instrument performance code.

Once you have completed the form/s, save it/them, named as described in the **instructions** and include with your submitted recognition kit.

For subclass 6.7

- Verification carried out at Betta Food Service Pty Ltd, Unit 4, Excelsior Industrial Estate, 465 Challenger Way, Booval Qld 4304. ABN 923742645245
- Verification carried out on the 11/3/21 by James Ho. Verifier number VR-00987.
- Licensee is Complete Packaging Solutions Pty Ltd SL-0898. Licensee's Mark is CPS. Licensee's ABN is 434353536565
- Instrument verified has approval number 6/14G/19, with maximum capacity 30 kg, serial number F123456.
- Instrument was adjusted and verified following rejection by a Trade Measurement Inspector who had found the instrument to be outside MPE to the customer's disadvantage.

Satisfactory Incomplete Incorrect

For subclass 6.8

- Verification carried out at Hervey's Landscape Supplies at 4 Western HWY, Avalon, Vic 3999 ABN 456567878909
- Verification carried out on the 14/2/21 by Jeff Smith, verifier number VR-00987.
- Licensee is Russell-Smith Pty Ltd SL-0435, Licensee's Mark is RSM. Licensee's ABN is 11112223333
- Instrument verified is an RDS Loadmaster Alpha 100 wheeled loader weighing instrument, approval number NMI 6/20A/6 fitted to a forklift, registration 233 RSM, with a maximum capacity of 500 kg, serial number R123456
- Instrument was verified following a replacement of the display unit

Satisfactory Incomplete Incorrect

For subclass 18.2

- Verification carried out at Jimmy's Fruit Barn, 463 Gundagai Avenue, Penrith, NSW 2750, ABN 445566778899.
- Verification carried out on the 7/4/21 by Lesa Gonzales. Verifier number VR-00999.
- Licensee is TekSpec Pty Ltd SL-0565, Licensee's Mark is TEK. Licensee's ABN is 465372937463
- Instrument verified is a Future Net Model OSPoS Point of Sale System, supplementary approval number NMI S584, serial number OSP43456.
- Instrument was verified following a replacement of a faulty circuit board, detected after a breakdown.

Workplace test reports and documents

In your workplace you should develop your skills by testing instruments in accordance with the national instrument test procedures, ideally under the supervision of an experienced, competent verifier. When completing tests, record your results, the details of the instruments tested and reference weights/equipment used in test reports as used in your workplace. Show any calculations you use during the process.

Wherever possible, include reports for testing different types of instruments, and non-compliant instruments, to demonstrate your knowledge of the requirements.

If you have access to an experienced verifier, ask them to sign each test report to indicate they have observed you test the instrument, in accordance with the relevant NITP (and any printed documents) relating to instruments they have observed you test, before scanning the reports you will submit.

For subclasses 6.7-6.8

You must provide three (3) test reports in total.

From the pool of test reports you have completed in the workplace, submit a minimum of **two (2)** reports, **with accompanying calculations**, representing your best work and demonstrating your understanding of the test procedures and processes required for **initial verification of the instruments**. Be sure to include at least **one (1)** report for each subclass being assessed.

Indicate on the report where you would apply the verification mark to each instrument tested.

You will provide a **third (and fourth, if completing both subclasses) test report** from the test you complete when doing your observation/video.

Scan the test reports and include them with your completed recognition kit, named as described in the instructions.

For subclass 18.2

You must provide three (3) test reports in total, along with any documents/labels printed during testing of these instruments

From the pool of reports you have completed in the workplace, submit a minimum of **two (2) reports**, **with accompanying calculations**, representing your best work and demonstrating your understanding of the test procedures and processes required for **initial verification** of POS systems. **Include copies of any printed documents produced during testing for each system.**

Indicate on the report where you would apply the verification mark to each instrument tested.

You will provide a third test report from the test you complete when doing your observation/video.

You must include at least one test report and documents from testing a POS system directly, at the site where it is used, even if your organisation mainly tests instruments remotely. **This method of testing must be used for your observation/video.**

Scan the test reports and printed documents and include them with your completed recognition kit, named as described in the instructions.

Once you have completed all your written assessments and test reports, ask the relevant person/s to complete one or more of the following third party report forms before emailing your whole kit and additional documents to the NMI Administrator.

Third party report (experienced verifier)

Applicant:

Use this report ONLY if you hold the relevant statement(s) of attainment for the subclass/es being assessed. For example, if you do not have a statement of attainment that includes 18.2, another verifier who holds the relevant statement of attainment should also complete a copy of this form, referring to that part of the kit. Persons providing a report must have directly supervised the applicant during training and completion of the simulated verifications for which the applicant is providing test reports. If other verifiers have also supervised the applicant, ask each of them to complete an additional report.

You must complete all pages of this report, in particular, you must include written comments to support your responses in the checklist. It is essential that you detail your observations of how the applicant ensured safety for self and others and how clearly and effectively the applicant communicated with clients/colleagues. We thank you for your contribution. The applicant's assessor may need to contact you to clarify your responses, or to gain additional information

Are you a verifier or inspector of trade measurement?	Yes	No	
Verifier/inspector number:			
What subclass/es of instrument are indicated on the statement/s of attainment for you hold (e.g. 6.7, 18.2)?			
Have you verified instruments of these subclasses within the last 18 months?	Yes	No	
State approximate numbers verified for each subclass:			
Describe briefly your level of experience in testing and verifying instruments of t			

Describe briefly your level of experience in testing and verifying instruments of the subclasses for which the applicant is being assessed. For example, how long have you been working with these instruments and in what ways (repairs, installation, verification).

During the last 12 months I have personally observed the applicant test the undermentioned instruments/POS systems (including those detailed in the test reports I have signed) in accordance with the National Instrument Test Procedures, paying close attention to detail and accuracy, while correctly selecting, using and handling the appropriate reference standards/test equipment:

	Yes	No	If yes, number of instruments tested
6.7 Automatic packaging conveyor weighers			
6.8 Wheeled Loader weighing instruments – tested using calibrated test objects			
6.8 Wheeled Loader weighing instruments – tested using a control instrument			
6.8 Wheeled Loader weighing instruments – tested using standard weights			
18.2 Point of sale systems			
In addition, the applicant has demonstrated to me correctly on at least two occasions (in a simulated environment) how a verification label should be marked and where it should be applied to instruments of this/these subclasses.			
Name of third party:	D	ate:	
Telephone number of third party:			

RK 6.7, 6.8 & 18.2 F V3.1

Third party report (experienced verifier)

На	ve you observed the applicant:	Yes	No	Not applicable or not able to comment
•	liaise effectively with traders when organising site visits to ensure any assistance/equipment is provided, and to minimise impacts on traders, customers and employees – in accordance with company expectations?			
•	explain verification procedures and outcomes clearly and effectively to traders, including respectfully communicating any inadequacies in the way traders use instruments?			
•	correctly select, and ensure the suitability of, reference standards/test equipment for the specific task, as required by the relevant national instrument test procedures?			
•	maintain the integrity of reference standards/test equipment during their storage, transport and use to ensure they are suitable for use?			
•	identify, access and correctly interpret and apply certificates of approval and certificates of verification (e.g. Reg 13 or other appropriate certificate of verification of reference standards)?	s		

Third party report (experienced verifier)

Have you observed the applicant:

Yes No

Not applicable or not able to comment

 identify, access and correctly interpret and apply relevant test procedures when testing instruments?

 evaluate the impact of the operating environment on the performance of the instrument/standards/test equipment and make any adjustments to ensure there was no impact?

- identify local hazards and apply appropriate safety precautions as relevant to the hazard/s, in accordance with local legislation and company procedures? Include in your comments:
 - how they ensure safety for self and others when testing instruments
 - o examples of compliance with local induction requirements
 - o how they establish access to first aid

Third party report (experienced verifier) applicable or Have you observed the applicant: Yes No not able to comment correctly apply calculations to determine the verification result, as required by the national instrument test procedures? correctly identify and apply the correct maximum permissible errors for each individual test, as determined by national trade measurement legislation and the national instrument test procedures?

- analyse test results to determine whether an instrument could be marked for trade use, in accordance with the national instrument test procedures?
- record, report and maintain test results and findings clearly, accurately, securely and in accordance with company policy?
- correctly assess for compliance any auxiliary printing and indicating devices (non-POS) attached to measuring instruments?
- solve routine or unexpected problems and seek advice, when required? Provide at least one example.

From:

To:

The applicant has demonstrated oral and written language skills and numeracy skills to a standard expected for this role in our organisation.

Detail the approximate date range during which you have

observed the applicant as detailed above:

Yes

No

Name of third party:

Date:

Not

Third party report (non-verifier)

(This form is only for use where the applicant has not been supervised/trained by an experienced verifier of instruments relating to this kit)

Applicant:

Use this form if you have worked with the applicant but do NOT hold statements of attainment for this skill set (and unit of competency, if applicable)/subclasses.

You must complete all pages of this report. In particular, you must include written comments to support your responses in the checklist, including details of how the applicant ensured safety for self and others and how clearly and effectively the applicant communicated with clients/colleagues. We thank you for your contribution. The applicant's assessor may need to contact you to clarify your responses, or to gain additional information.

Describe briefly your working relationship to the applicant and the types of work activities you have observed the applicant undertake:

Have you observed the applicant:

Yes No

Not applicable or not able to comment

- liaise effectively with traders when organising site visits to ensure any assistance/equipment is provided, and to minimise impacts on traders, customers and employees – in accordance with company expectations? Provide at least one example.
- communicate clearly, effectively and respectfully with clients and colleagues? Give at least two examples.

Not applicable Have you observed the applicant: Yes No or not able to comment identify local hazards and apply appropriate safety precautions as relevant to the hazard/s, in accordance with local legislation and company procedures? Include in your comments: o how they ensure safety for self and others when testing instruments examples of compliance with local induction requirements how they establish access to first aid record, report and maintain test results and findings clearly, accurately and securely and in accordance with company policy? solve routine or unexpected problems and seek advice, when required? Provide at least one example Detail the approximate date window during which you have From: To: observed the applicant as detailed above: The applicant has demonstrated oral and written language skills and numeracy skills to a standard expected for this role Yes No in our organisation. Name of third party: Date: Telephone number of third party:

Third party report (non-verifier)

Record of assessor's conversation with third party (if required)

The assessor will speak to any third party/s where they have not provided sufficient confirmation of the performance of the applicant they have observed. This form will be used to record the outcomes of any conversation between the assessor and a third party. Name/s of third party/ies

Assessor's name: Date:

Outcome of assessor's review of applicant's test reports/printed documents

Applicant:

As part of your assessment, your assessor will use this form to record the accuracy of your submitted workplace documents.

Assessor: Use the check boxes to record if the documents have been completed/evaluated satisfactorily and align with the requirements of the skill set/unit of competency.

Instrument subclass	Satisfactory	Unsatisfactory	Not applicable
6.7 Automatic packaging conveyor weighers			
6.8 Wheeled loader weighing instruments – tested using calibrated test objects			
6.8 Wheeled loader weighing instruments – tested using a control instrument			
6.8 Wheeled loader weighing instruments – tested using standard weights			
18.2 Point of sale systems			

Please provide comments to support your findings on the submitted documents. Where videos are provided, use the skills observation report form for your comments.

Assessor's name: Date:

Record of conversation with the applicant (to be completed by the assessor)

Applicant:

As part of your assessment, you will have a conversation with your assessor who may ask questions to clarify your knowledge in the following areas. Your assessor will use this checklist to record your responses.

Assessor: Use the check boxes to record the competency areas where you have asked questions. **You need not ask questions for all areas**, particularly where satisfactory evidence of competence has already been provided. You should include a list of questions asked, with expected answers and responses given, in a separate Word document. Note each correct answer provided or detail any incorrect response.

	Satisfactory	Unsatisfactory	Not asked/not required	
 Preparation, planning and communication with trader 				
Using and maintaining reference standards and/or test equipment				
Certificates of approval				
Operating environment				
Work, health and safety including use of SDS/SWMS				
Maximum permissible errors				
Test procedures				
Test points				
Analysis of test results				
Marking instruments and verification documentation				
Auxiliary devices				
Reporting test results				
 Inappropriate use of instruments by trader 				
 Servicing licence documentation and procedures including maintaining confidentiality and security of data 				
Applicant's ID checked at interview:				
Assessor's name:		D	ate:	

Name of applicant:			
Skill set/unit of competency being assessed:			
Subclass of instrument being observed:			
Name of observer:		so	Assessor
Contact number for skills observer:			
Applicant's photo ID viewed by observer	Type of ID viewed:		
Test report attached			
The state of the second state of the			

Time at observation site:

As part of your assessment, you will need to demonstrate completing a simulated initial verification of at least one instrument/measure in a real or simulated workplace environment. This is a requirement of the performance evidence you must demonstrate for this skill set/unit of competency. During the observation, you should complete a test report for each instrument/measure tested and provide a copy of this to the person completing the skills observation. See also the Instructions for observation assessments.

Your assessor, or an NMI-appointed skills observer, will observe you. They will contact you to discuss arrangements for this part of your assessment.

During the observation, the assessor/observer will use this checklist to record your skills in verifying measuring instruments/measures in accordance with legal requirements. They will also be noting how you:

- interact with businesses and their employees before, during and after completing testing
- assess and manage safety during the task
- store, use and handle any reference standards or equipment used (where applicable)
- consider any real or potential environmental impacts on the instrument/measure under test (and the standards and equipment used in testing) and take any necessary steps to account for any impacts
- identify, access and interpret relevant documentation
- record, analyse and report the findings of testing
- communicate the results of testing and any other factors relevant to the usage of instruments/measures
- identify the location for, and simulate the application of, a verification mark

For subclasses 6.1-6.3 and some simple measures/measuring instruments, you may be invited to complete the observation in the trade measurement office in your local city.

For skills observations for other instrument/measure types, or where you do not live in a major city, we will ask you to arrange a site local to you, where a suitable instrument/measure is available. We will contact you with further instructions.

Observer: Use the check boxes to record your conclusions regarding each of the specific items detailed in the following list, where applicable. You must record additional notes and comments that are relevant to, and support, your conclusions, under each item. Essentially, you should describe what you have observed that supports the finding you have checked (what the applicant did).

NOTE: Items 2, 3, 4, 5, 6 and 9 not applicable for subclasses 18.1 and 18.2.

(Use one form per instrument observed)

I have observed the applicant complete a simulated verification test on the following instrument/measure and simulate applying a verification mark: (Include details of instrument/measure tested, reference standards/equipment used and dates/locations):

Did the applicant:		Yes	No	Not applicable
1.	liaise and communicate effectively with the trader prior to, during and after testing to ensure verification testing was carried out safely and with minimal disruption to the trader's business?			
2.	select and validate the suitability of reference standards/equipment for the specific verification task?			
	mo of assassar/SO:			Data

Did	the applicant:	Yes	No	Not applicable
3.	determine whether reference standards/equipment were suitable for use for the verification task/not defective?			
4.	maintain the integrity of reference standards/equipment during their transport, storage and use?			
5.	use the reference standards/equipment in the correct manner?			
Nar	me of assessor/SO:		D	ate:

Did the applicant:		Yes	No	Not applicable
6.	evaluate and (where required) adjust the impact of the operating environment on the performance of the standards/equipment?			
7.	evaluate and (where required) adjust the impact of the operating environment on the performance of the instrument/measure?			
8.	apply appropriate safety precautions and			
	conduct testing safely?			
Nar	ne of assessor/SO:		Da	ate:

Did the applicant:		Yes	No	Not applicable
identify, access, int certificates of verific standards/equipme	cation for reference			
otandaras, equipme				
10. identify, access, int certificates of appro	erpret and apply oval?			
11. identify, access, int test procedures?	erpret and apply relevant			
Name of assessor/SO:			Date:	

Did the applicant:		Yes	No	Not applicable
12. use specified calculatio performance result?	ns to determine the			
13. apply appropriate maxir errors?	mum permissible			
enois:				
14. analyse test results to c	letermine whether the			
measure could be mark	ted for trade use?			
Name of any (20)				
Name of assessor/SO:			Date:	

Did the applicant:	Yes	No	Not applicable
15. report results and findings clearly and accurately?			
16. demonstrate how to apply the verification			
mark?			
17. identify and communicate any inadequacies in trader's use of the instrument/measure?			
Name of accessor(00		.	
Name of assessor/SO:		Date:	