

<b>POLICY</b>			
Policy Number	LM-P-010-09-08	Compiled by: B Beard	Signature: 
Effective Date	2 July 2007		
Version No:	1	Approved by: SH Carstens	Signature: 
File name:	LM-P-010-09-08-Requirements for verification marks and seals		

## 1. Scope

The design of verification marks and seals used by verification laboratories and procedure for approval before their issue and use.

## 2. Reference documents

Trade Metrology Act

## 3. Policy

The design of verification marks and seals used by verification laboratories must be approved before their issue and use. The design, layout and a sample mark and seal (impressed seal, stamp on a piece of lead or a stick on verification mark label and/or seal) must be submitted together with the application to the Regulator (Director) to become a designated (permitted to verify) facility. A database of all registered designs will be kept by the Regulator and will be updated when application is made for the renewal of the designation. The definition of "Certifying Stamp" in Part II of the Trade Metrology regulations and the following apply.

*NOTE: The application of integrity seals in the form of stick on labels is approved at the time of type approval or modification of an instrument. Details of where the seals must be applied will be given in type approval documentation. Verification marks, integrity seals and rejection marks will be confirmed as complying with requirements when submitted to the Regulator for designation of the laboratory.*

### 3.1 Options for verification marks

- a) Stamp
- b) Seals
- c) Stick - on- label

Requirements for labels are as follows:

- i. They must destruct if an attempt is made to remove them.
- ii. They must be clear, unambiguous and all information contained thereon must be indelible.
- iii. They must be protected against damage, deterioration or wear and tear through normal use and from the environment in which the instrument is used e.g. washable plastic covering.

*NOTE: If damaged or information is erased the verification status will be invalidated irrespective of whether or not a verification certificate is produced.*

### 3.2 Configuration of data on verification marks

All verification marks shall bear at least an indication of the year of verification, identification of the accredited laboratory and identification of the verification officer/inspector as required by the definition of a "certifying stamp" in Part. II of the Trade Metrology Regulations.

#### a) Stamps

The year of verification shall be on the bottom part of the stamp and shall consist of at least the last digit of the year. Other information may be arranged as per company requirements.

#### b) Seals

Company and VO data shall be on one side together with the year of verification at the bottom, if desired. The reverse side may be used to display the year of verification but no other letters or figures may then appear with the year which shall consist of at least the last digit of the year.

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### c) Labels

Configured in any manner provided the year of verification is displayed unambiguously and contains at least the last two digits of the applicable year if pre-printed on the label. If the information is handwritten then the full date including day, month and at least the last two digits of the year shall be indicated. Only information relevant to the verification activity shall be permitted. Re-verification or expiry dates may not be indicated on labels unless the period reflects a legally prescribed minimum period. If necessary to quote a shorter period, documented evidence that the user/owner required the shorter period, must be available. If SANAS gives permission the SANAS Accreditation logo may also appear. Any additional information included on a sticker will be evaluated when it is evaluated for approval and no changes may be made to the label after approval, without re-approval. Any incorrect information completed by hand may invalidate the verification of the instrument to which such incorrect label is applied.

### 3.3 Use of informative stickers

**Accredited laboratories may attach a sticker or transfer on the outer housing or dial face, for example a petrol pump, to indicate that they have serviced or supplied the instrument but such sticker may not refer to verification or imply verification or that the instrument complies with requirements of the Trade Metrology Act. It shall also not bear any reference to the SABS or the regulator.**

### 3.4 Rejection of instruments

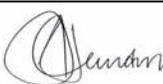
The method of rejection is the defacing of the chosen verification mark option by a six-point star as required in Regulation 24 of Part II of the Trade Metrology Regulations, but the following will be allowed.

- If a verification stamp was selected, then the rejection method shall be a six-pointed star stamp over the verification mark or obliteration of the verification mark and the application of a label conforming to the requirements of 4 c) below.
- If a seal is selected to apply the verification mark the rejection mark shall be placed on the seal identified to bear the verification mark and be applied over the verification mark or obliteration of the verification mark e.g. by removing the seal and the application of a label conforming to the requirements of 4 c) below.
- If a label is selected to apply the verification mark, the instrument shall be rejected by means of a rejection label bearing the required information placed over an existing verification mark label (need not cover it completely) or, if such label is not present, in the same position that the verification label would have been placed.

A rejection label shall be red in colour and shall contain only the following;

- The statement "This instrument has been rejected and may not be used for a prescribed purpose in terms of the Trade Metrology Act, until verified"
- A six pointed star (this is to comply with section 25 of the Act and Regulation 24 so that in the event of a court case an inspector can state that the instrument was marked with a six pointed star as required for a contravention to be established).
- The number of the rejection certificate which may be hand written next to suitable wording indicating that it is the rejection certificate number.
- The name of the accredited laboratory may also appear.
- If SANAS gives permission the SANAS Accreditation logo may also appear.

If placed over the previous verification label it must be unambiguously clear that the instrument has been rejected. It is not acceptable to obliterate a verification mark on a label by indelibly drawing a six pointed star over it.

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Where a laboratory rejects an instrument that was previously verified using a different means of applying the verification mark, it shall use its selected means of applying the rejection mark after obliterating any previous verification mark or marks.

### 3.5 Sealing

#### a) Hard seals

##### i. By means of stamps or their alternatives

Seals in the form of wax or lead plugs shall be sealed with a stamp containing at least the laboratory and VO identification i.e. info presently required for sealing pliers, unless the small size of the seal precludes this. In the case of pro-weights at least the laboratory must be identified on the stamp but the same stamp used for other sealing (previous sentence) may be used. If a separate seal is used for pro-weights it shall also be registered with the Regulator when applying to be designated as a verification laboratory.

*NOTE: See clause 6.4 for sealing meters with common indicators*

##### ii. By means if stick on labels

The minimum requirements for sealing stickers to be used to prevent unauthorised access to measuring instruments are the following:

1. Seals shall destruct when an attempt is made to remove them i.e. a seal may not be capable of being removed from the instrument without physical damage to the seal and the same seal may not be capable of being used a second time.
2. Seals shall contain the following compulsory minimum wording/data:
  - a) "Certification void when broken"
  - b) "Seal"
  - c) "Date"
  - d) "VO number"
  - e) Name and or logo of company

The seal or the minimum requirements are not a substitute for the verification mark.

Sealing by means of stickers shall be approved during type approval of the instrument or modification thereto and the location of the seal on the instrument shall be described in the type approval documentation. If a laboratory wishes to use sealing stickers in place of the approved sealing method a modification to the respective instruments will need to be approved. Approval of the actual seal will be done by the Regulator

#### b) Software (electronic) sealing

In certain instances electronic instruments will be approved with software (electronic) sealing facilities to protect their adjustment/metrological integrity. In these cases there will always be a new code (could be a sequential or random number or letters) generated after each intervention and which is capable of being displayed by the instrument. The code indicating the last intervention at the time of verification must be included unambiguously in a clearly demarcated place on the verification certificate for control purposes. Inspectors should acquaint themselves with the procedure to display this code from the pattern description and then compare the displayed code with that on the certificate. If not the same code then the seal has been compromised and the instrument is regarded as being unsealed and therefore not verified. If this method of sealing is used, and the instrument does not have to be permanently marked on its outer housing with this number, the retention of the verification certificate with the instrument becomes obligatory as it forms part of the proof of sealing and this should be brought to the attention of all role players. In the case of the new SANS 1649 the applicable electronic sealing reference code shall be permanently affixed on or near the main data plate in addition to it being displayed electronically by the instrument. It is foreseen that in most cases a sealing sticker will be used for this purpose but details of the method chosen will be given in the

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pattern description. If the sticker is removed, altered or the code can't be read, the instrument will be regarded as unsealed. A verification sticker may not be used to indicate this code. In this case the inspector can compare the marked code with the code indicated electronically and although SANS 1649 requires the code also to be on the verification certificate it is not so important for the certificate to be retained with the scale.

### 3.6 Positioning of verification mark

#### 3.6.1 General requirements

The following requirements apply generally where specific requirements are not given in clauses 6.2 to 6.4 or in a pattern description of a specific instrument.

##### a) Stamps

As per pattern description or general design requirements for instruments not requiring approval. (See also relevant regulation requirements).

##### b) Seals

As per pattern description, regulation requirements or on a seal specifically dedicated for receiving the verification mark in close proximity to the existing stamp plug i.e. it is not one of the required integrity/protective seals. Where this is not possible it is acceptable to be on an essential part (main housing) of the instruments, which cannot be removed easily and fitted to another instrument.

##### c) Labels

Visible during normal use and placed on an essential part (main housing) of instruments, which cannot be removed easily and fitted to another instrument (see also regulation and pattern description requirements).

#### 3.6.2 Liquid Fuel Dispensers

If there is no specific pattern description requirement allowing seals or labels to be used then one of the following methods may be chosen to apply the verification mark.

##### a) Stamps

As per pattern descriptions. (See also SANS 1650 requirements).

*NOTE: If a stamping plug is described in the pattern description but the supplier or verifier chooses a seal or label option do not insist that a stamping plug is fitted.*

##### b) Seals

On the seal intended to seal a mechanical calibration mechanism of the meter or in the case of dispensers not fitted with a mechanical calibration mechanism, on a seal dedicated as the verification mark and identified in the pattern description as per clause 6.3.1 d) of SANS 1650.

##### c) Labels

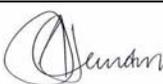
Applied to a suitable smooth surface on the meter in a visible position when the covers are removed as per clause 6.3.2 of SANS 1650. If necessary the label may be placed on a metal tag bolted to the meter by one of the sealed bolts securing the measuring chamber cover to the body (i.e. If this seal is broken the dispenser must be re-verified).

#### 3.6.3 Liquid meters with one mechanical or electronic indicator per meter

If there is no specific pattern description requirement allowing seals or labels to be used then one of the following methods may be chosen to apply the verification mark.

##### a) Stamps

In a lead plug fitted in a visible position on the meter body as per pattern description. (See also regulation requirements).

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*NOTE: If a stamping plug is described in the pattern description but the supplier or verifier chooses a seal or label option do not insist that a stamping plug is fitted.*

**b) Seals**

On the seal used to seal the measuring chamber cover to the body of the meter. For meters with no body sealing requirements e.g. coriolis or turbine meters, the verification mark shall be applied to the seal securing the indicator or electronics component to the meter body.

*NOTE: The use of a mechanical calibrator seal is not an option for applying the verification mark.*

**c) Labels**

Applied to a suitable smooth surface on the meter body in a visible position or on a metal tag bolted to the meter body by one of the sealed bolts securing the measuring chamber cover to the body (i.e. If this seal is broken the meter must be re-verified).

**3.6.4 Meters fitted with a common electronic indicator and single multi product meters**

For meters with a common indicator where the pattern description does not specify a method or allow seals or labels to be used, the verification mark shall be applied either;

- a) To a stamping plug in the body of each meter, or;
- b) To the seal which seals the measuring chamber cover to the body of each meter (i.e. If this seal is broken the meter must be re-verified), or;
- c) By means of a sticker, placed on a metal tag, bolted to each meter by one of the sealed bolts securing the measuring chamber cover to the body (i.e. If this seal is broken the meter must be re-verified).

The following sealing and verification requirements apply when a register serves more than one meter:

- a) Should one of the meters be left in a rejected condition the indicator seals shall be applied to protect the remaining meters but the rejected channel on the indicator must be made inoperative.
- b) Should one meter be repaired and thereafter verified, a supplementary certificate shall be issued for the remaining meters not re-verified.

The following sealing and verification requirements apply when one meter has a multi channel indicator for delivery of more than one product.

- a) Verification certificates shall contain the test results for each channel (product) verified. As there will be a common verification mark and seals for all products, all channels (products) will need to be verified at the same time.
- b) Should one of the channels (products) be left in a rejected condition the indicator seals shall be applied to protect the remaining channels but the rejected channel on the indicator shall be made inoperative.
- c) Should the meter be repaired to be correct with all products intended to be delivered all channels (products) shall be re-verified and a new verification certificate(s) issued.

**3.6.5 Liquor measuring devices (optics)**

If there is no specific pattern description requirement allowing seals or labels to be used then one of the following methods may be chosen to apply the verification mark.

**a) Stamps**

In a lead or wax plug fitted in a visible position on the body as per pattern description. (See also regulation requirements).

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*NOTE: If a stamping plug is described in the pattern description but the supplier or verifier chooses a seal or label option do not insist that a stamping plug is fitted.*

**b) Seals**

On the seal used to seal the measuring chamber to the body of the device.

**c) Labels**

Applied to a suitable smooth surface on the body. It may also be placed on the back of the transparent measuring chamber provided that it does not obscure the quantity marking or prevent the observation of the liquid level when used in the normal operating position.

*NOTE: The label should be sufficiently small so as not to protrude over any edge of the body so as to be easily damaged.*