Scale Manufacturers Association

Standard

Software Sealing
Method of Access

(SMA SSM-1102)

First Edition

Approved by SMA

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1. DEFINITIONS

Calibration Counter
A continuous numeric counter containing a minimum three-digit value (000 to 999, leading zeros are not required to be displayed). When displayed or printed this value is preceded by the word "Calibration" or one of the following abbreviations: C, c, CAL or cal.

Configuration Counter
See Parameter Counter

Event Log
The name of the device used to store event records.

Event Record
A record that contains the parameter ID, the date and time of the change and the new parameter value.

Metrological Parameter
A parameter that affects the instruments operation with respect to the requirements specified in NIST Handbook 44.

NIST
National Institute of Standards and Technology

Parameter Counter
A continuous numeric counter containing a minimum three-digit value. (000 to 999, leading zeros are not required to be displayed) When displayed or printed this value is preceded by the word "Parameter" or one of the following abbreviations: P, p, PAR, PAr or par.

Software Sealing Access Method
A key on a keyboard; a hyperlink on a display; etc, labeled with appropriate marking. See Section 5 of this standard for examples.

Zero Key
The Zero Key is the key used to zero or re-zero the instrument.

2. SCOPE

This standard defines a procedure used to access the Parameter and Calibration Counters of a Category 1 and 2 sealing method and the Event Log used in the Category 3 sealing method.

Information regarding the technical requirements of the Category sealing method is found in NIST Handbook 44.

The information supplied in this standard was created using the information contained in NIST Handbook 44, 2001 edition.

3. CATEGORY 1 AND 2 SEALING METHOD

3.1 Description

The Category 1 and 2 sealing method consists of two event counters used to track changes to the configuration parameter and calibration values of the instrument.

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3.2 Access

The values of the Parameter and Calibration Counters shall be accessed in one of the following manners.

3.2.2 Preferred Access Method

With the device in any normal operating mode, activate the software sealing access method to gain access to the Weights and Measures information.

The minimum information required is the description and value of the counters.

On instruments using a single line display the counters shall be displayed individually.

The Parameter counter will be displayed first followed by the Calibration counter and then return to the normal operating mode.

If a keypress is required to advance to the next screen or return to the normal weighing mode, the display shall indicate this need and the software sealing access key shall be used.

If no keypress is required, the counters shall be displayed for a period of no less than three seconds each and then return to the normal operation.

Devices with enhanced displays may provide more information including Weights and Measures required markings and other Weights and Measures information.

3.2.2 Alternate Access Method

With the display reading zero, press and hold the Zero Key for a minimum of two seconds to access the counters.

The counter's description and value shall be displayed for a period of no less than three seconds each.

The instrument will then automatically return to the normal operating mode.

On instruments using a single line display the counters shall be displayed individually.

The Parameter counter will be displayed first followed by the Calibration counter.

If the Zero key also performs On/Off functions, the counters may be displayed during the instruments normal power up sequence.

The counter's description and value shall be displayed for a period of no less than three seconds each.

On instruments using a single line display the counters shall be displayed individually.

The Parameter counter will be displayed first followed by the Calibration counter.

4. CATEGORY 3
SEALING METHOD

4.1 Description

A Category 3 sealing method is a single event log containing a record of each change to a metrological parameter.

Each record shall contain the parameter ID, the date and time of the change and the new parameter value.

The event log must have a capacity to retain records equal to ten times the number of sealable parameters in the device, but not more than 1000 records are required.

4.2 Access

With the device in any normal operating mode, activate the software sealing access method to gain access to the Weights and Measures information.

The display will change to an information page or event log access display and prompt the operator with additional instructions to display and/or print the contents of the event log.

The instrument will remain in this mode until instructed to exit and then return to the normal operating mode.

Devices with enhanced displays may provide more information including Weights and Measures required markings and other Weights and Measures information.

5. MARKING

Access to the software sealing information shall be preformed in one of the following methods.

5.1 Preferred Marking Method

The access method shall be marked or labeled with;

· "Help" and then in a submenu, "Weights and Measures" or "W&M"

· The letters"W&M"

· Or the icon of a balance similar to the examples shown below.

5.2 Alternate Marking Method

Regardless of the Zero Key marking, if the Zero Key is used for access, the marking indicating the device uses a software sealing method meeting this specification is a "/A" in the right hand corner of the Zero Key. Several examples are shown below.

3
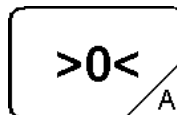
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