

GMA-20.1 V S.2.5. Provisions for Sealing.

Source:

NTEP Grain Analyzer Sector

Purpose:

Correct an error caused by a 2019 amendment that inadvertently removed applicability of the provisions in Table S.2.5.1. for any devices manufactured prior to 20~~20~~21.

Item Under Consideration:

Amend NIST Handbook 44, Grain Moisture Meter Code 5.56 (a) as follows:

S.2.5. Provision for Sealing. – For devices and systems in which the configuration or calibration parameters can be changed by use of a removable digital storage device, security shall be provided for those parameters as specified in G-S.8.2. For parameters adjusted using other means, the following applies:

Provision shall be made for applying a **An approved means of** security **shall be provided** seal in a manner that requires the security seal to be broken, or for using other approved means of providing security (e.g., audit trail available at the time of inspection as defined in **paragraphsTable S.2.5.1 S.2.5. Sealing Requirements for Devices Manufactured Between January 1, 1999 and January 1, 202021** Categories of Device and Methods of **and S.2.5.2 S.2.5.1. Sealing Requirements for Devices Manufactured on or after January 1, 202021**) before any change that affects the metrological integrity of the device can be made to any mechanism.

(Amended 2019, ~~2020~~21)

S.2.5.1. Sealing Requirements for Devices Manufactured Between January 1, 1999 and January 1, 202021. – The appropriate sealing requirements in Table S.2.5.1. shall apply.

Table S.2.5.1, Table S.2.5

Categories of Device and Methods of Sealing

For Devices Manufactured Between January 1, 1999 and January 1, 2021

Categories of Device	Methods of Sealing
<p>Category 1[±]: <i>No remote configuration capability.</i></p>	<p><i>Seal by physical seal or two event counters: one for calibration parameters (000 to 999) and one for configuration parameters (000 to 999). If equipped with event counters, the device must be capable of displaying, or printing through the device or through another on-site device, the contents of the counters.</i></p>
<p>Category 2[±]: <i>Remote configuration capability, but access is controlled by physical hardware.</i></p> <p><i>A device shall clearly indicate that it is in the remote configuration mode and shall not be capable of operating in the measure mode while enabled for remote configuration.</i></p>	<p><i>The hardware enabling access for remote communication must be at the device and sealed using a physical seal or two event counters: one for calibration parameters (000 to 999) and one for configuration parameters (000 to 999). If equipped with event counters, the device must be capable of displaying, or printing through the device or through another on-site device, the contents of the counters.</i></p>
<p>Category 3[±]: Remote C<i>onfiguration capability access may be unlimited or controlled through a software switch (e.g., password).</i></p> <p><i>When accessed for the purpose of modifying sealable parameters, the device shall clearly indicate that it is in the configuration mode and shall not be capable of operating in the measuring mode.</i></p>	<p><i>An event logger is required in the device; it must include an event counter (000 to 999), the parameter ID, the date and time of the change, and the new value of the parameter (for calibration changes consisting of multiple constants, the calibration version number may be used rather than the calibration constants). A printed copy of the information must be available through the device or through another on-site device. The event logger shall have a capacity to retain records equal to 25 times the number of sealable parameters in the device, but not more than 1000 records are required. (Note: Does not require 1000 changes to be stored for each parameter.)</i></p>

Table S.2.5.1, Table S.2.5

Categories of Device and Methods of Sealing

For Devices Manufactured Between January 1, 1999 and January 1, 2021

<i>Categories of Device</i>	<i>Methods of Sealing</i>
<p><u>Category 3a: No remote capability, but operator is able to make changes that affect the metrological integrity of the device (e.g., slope, bias, etc.) in normal operation.</u></p> <p><u>*When accessed for the purpose of modifying sealable parameters, the device shall clearly indicate that it is in the configuration mode and shall not be capable of operating in the measuring mode.</u></p>	<p><u>Same as Category 3</u></p>
<p><u>Category 3b: No remote capability, but access to metrological parameters is controlled through a software switch (e.g., password).</u></p> <p><u>*When accessed for the purpose of modifying sealable parameters, the device shall clearly indicate that it is in the configuration mode and shall not be capable of operating in the measuring mode.</u></p>	<p><u>Same as Category 3</u></p>
<p>¹ Not allowed for devices manufactured on or after January 1, 2020</p>	
<p>² Required for all devices manufactured on or after January 1, 2020</p>	

[Nonretroactive as of January 1, 2020 ~~1999~~]

[*Nonretroactive as of January 1, 2014]

(Amended 1998, 2013, and 2019, ~~2020~~ **2021**)

Note: Zero-setting and test point adjustments are considered to affect metrological characteristics and must be sealed.

(Added 1993) (Amended 1995 and 1997)

S.2.5.2, S.2.5.1. Sealing Requirements for Devices Manufactured on or after January 1, 2021. - An event logger is required in the device; it must include an event counter (000 to 999), the parameter ID, the date and time of the change, and the new value of the parameter (for

calibration changes consisting of multiple constants, the calibration version number may be used rather than the calibration constants.)

A printed copy of the information must be available through the device or through another on-site device. The event logger shall have a capacity to retain records equal to 25 times the number of sealable parameters in the device, but not more than 1000 records are required. (Note: Does not require 1000 changes to be stored for each parameter.)

Background/Discussion: See Appendix A, Page S&T-A314.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to <https://www.ncwm.com/publication-16> to review these documents.