10. (from DES) Provision For Metrological Sealing of Adjustable Components or Audit Trail

Code References: G-S.8.1. and S.1.11.

Due to the ease of adjusting the accuracy of electronic scales, all scales (except for Class I scales) must provide for a security seal that must be broken or provide an audit trail, before any adjustment that detrimentally affects the performance of the electronic device can be made. Only metrological parameters that can affect the measurement features that have a significant potential for fraud and features or parameters whose range extends beyond that appropriate for device compliance with *NIST Handbook 44* or the suitability of equipment, shall be sealed.

For additional information on the proper design and operation of the different forms of audit trail, see *Appendix B for the Requirements for Metrological Audit Trails.*

The judgment of whether or not a method of access to an adjustment represents a "significant potential for fraud" and will normally require sealing for security will be made based upon the application of the *Philosophy for Sealing in Appendix A.*

Sealing - General

In addition to satisfying the physical security sealing requirement; the presence of a physical seal shall clearly indicate that the setup or configuration mode (any mode permitting access to any or all sealable parameters based upon the application of the *Philosophy for Sealing in Publication 14)* of the device cannot be accessed without additional actions (e.g., removal of a jumper, pressing a key or switch, etc.) only possible after the removal of the seal.

If the use of a physical seal is the only approved method of sealing,; it shall not be possible to apply the physical seal with the device in the setup or configuration mode (any mode permitting access to any or all sealable parameters based upon the application of the *Philosophy for Sealing in Publication 14)* unless the device has a clear indication that the device is in this mode. See the list of acceptable and unacceptable indications below.

Technologist:				
Project number:				
Applicable for Devices Using a Physical Seal				
			Remarks:	
Date				
Time				
Temp ºC				
RH (%)				
Mechanism used to enter calibration / configuration				
Jumper	**Pushbutton (momentary switch)**	**Toggle / Slide Switch**	**Other (Describe in Remarks)**	**Meets requirements**
Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A

				☐

Mechanism effective upon exit of calibration / configuration in Approved Mode, when mechanism is properly set according to manufacturers specifications.				
Jumper	**Pushbutton (momentary switch)**	**Toggle / Slide Switch**	**Other (Describe in Remarks)**	**Meets requirements**
Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A ☐	Yes☐ No ☐ N/A ☐

(**Note:** Means of entering and exiting the calibration/configuration access mode shall be listed on the NTEP CC.)

Indications representing that the device is configured with the setup or configuration mode enabled (i.e., any mode permitting access to any or all sealable parameters)	
This list is not limiting or all-inclusive; other indications may be acceptable.	
Acceptable Clear Indications	**Indications NOT Acceptably Clear**
Unusable weight indications Example: **C100.05E**	**C 100.05 lb**
"not **HB 44**" annunciator	Any digit in the weight differentiated by size, shape, or color
"CAL" annunciator (single or mixed case)	Weights w/o units Example. **100.05**
"Set-up" annunciator (single or mixed case)	Flashing weight value
"Config" annunciator (single or mixed case)	Weight with no annunciators displayed
	Weight all annunciators displayed