

Multi-Point Calibration Group

Recommendations on S&T Items

Item 330-3 N4.1.3. Normal Tests on Wholesale Multi-Point Calibration Devices

The committee voted unanimously to withdraw this item because the formula for determining normal and special tests $[1/2(\text{max developed flow rate} + \text{rated min flow rate})]$ is sufficient to address the concerns about appropriateness of the meters and when to apply normal tolerances.

Item 330-4 N.4.2.5. Determination of Error on Wholesale Devices with Multiple Flow Rates and Calibration Factors

The committee voted unanimously to add a user requirement to make it clear that users who enable multiple linearization factors must verify those factors, and to replace existing language in the proposal with the following language which the group thinks addresses concerns previously raised:

N.4.5 Verification of Linearization Factors. All enabled linearization factors shall be verified when a device

- (a) is initially being put into commercial use;*
- (b) has been placed into service and is officially being tested for the first time;*
- (c) is being returned to commercial service following official rejection for failure to conform to performance requirements and is being officially tested for the first time after corrective service;*
- (d) is being officially tested for the first time after major reconditioning or overhaul; or*
- (e) at the discretion of the official with statutory authority.*

The verification of enabled linearization factors may be done through physical testing or empirical analysis.

UR.4. Maintenance Requirements

UR.4.1. Use of Adjustments Whenever devices are adjusted, all enabled linearization factors shall be verified through physical testing or empirical analysis to determine that the errors are in tolerance and any adjustments which are made, shall be made so as to bring performance errors as close as practicable to zero value.

Item 331-1 N4.1.3. Normal Tests on Wholesale Multi-Point Calibration Devices

The committee voted unanimously to withdraw this item because the formula for determining normal and special tests $[1/2(\text{max developed flow rate} + \text{rated min flow rate})]$ is sufficient to address the concerns about appropriateness of the meters and when to apply normal tolerances.

Item 331-2 N.4.2.1. Determination of Error on Vehicle Tank Meters with Multiple Flow Rates and Calibration Factors

The committee voted unanimously to add a user requirement to make it clear that users who enable multiple linearization factors must verify those factors, and to replace existing language in the proposal with the following language which the group thinks addresses concerns previously raised:

N.4.5 Verification of Linearization Factors. All enabled linearization factors shall be verified when a device

- (a) is initially being put into commercial use;*
- (b) has been placed into service and is officially being tested for the first time;*
- (c) is being returned to commercial service following official rejection for failure to conform to performance requirements and is being officially tested for the first time after corrective service;*
- (d) is being officially tested for the first time after major reconditioning or overhaul; or*
- (e) at the discretion of the official with statutory authority.*

The verification of enabled linearization factors may be done through physical testing or empirical analysis.

UR.4. Maintenance Requirements

UR.4.1. Use of Adjustments Whenever devices are adjusted, all enabled linearization factors shall be verified through physical testing or empirical analysis to determine that the errors are in tolerance and any adjustments which are made, shall be made so as to bring performance errors as close as practicable to zero value.

Item 360-2 Appendix D – Definitions: calibration parameter and multi-point calibrated device

The group voted unanimously to withdraw this item. A definition of multi-point calibrated device is not needed any longer since the related proposals have been changed to reference enabled linearization factors.