

## **NIST Handbook 44, G-UR.2.2., Installation of Indicating or Recording Element; and G-UR.3.3., Position of Equipment.**

### **G-UR.2.2. Installation of Indicating or Recording Element**

A device shall be so installed that there is no obstruction between a primary indicating or recording element and the weighing or measuring element; otherwise there shall be convenient and permanently installed means for direct communication, oral or visual, between an individual located at a primary indicating or recording element and an individual located at the weighing or measuring element. (See also G-UR.3.3.)

### **G-UR.3.3. Position of Equipment**

A device or system equipped with a primary indicating element and used in direct sales, except for prescription scales, shall be positioned so that its indications may be accurately read and the weighing or measuring operation may be observed from some reasonable "customer" and "operator" position. The permissible distance between the equipment and a reasonable customer and operator position shall be determined in each case upon the basis of the individual circumstances, particularly the size and character of the indicating element. (Amended 1974 and 1998)

### **References**

P.A. 283, of 1964, as amended; NIST Handbook 44, 2002 Edition

### **Interpretation**

MDARD W&M interprets G-UR.2.2. and G-UR.3.3. to apply to all commercial devices - with special application considerations for weighing devices in general - and vehicle scale applications in particular.

With the advent of electronic weighing systems, separation between primary indicating/recording elements and a primary weighing element is becoming more common, with some installations incorporating significant distances between primary elements. In some cases, the scale operator has no direct communication with the scale user due to an obstruction of some type. (For the purpose of interpreting G-UR.2.2. and G-UR.3.3., a large distance between elements may also be considered an "obstruction".)

G-UR.2.2. requires that a "convenient and permanently installed means for direct communication" be in place where such obstructions exist. The communication may be oral or visual between individuals located at the two primary elements. The reasons for this requirement include, but are not limited to:

- facilitate communication between operator/user
- the user knows when to enter/exit scale
- confirmation of a successful weighment

The requirements of G-UR.2.2. apply to both "direct" and "indirect" sales.

G-UR.3.3. Position of Equipment also applies when considering "direct" sales. A "direct sale" is defined as: "A sale in which both parties in the transaction are present when the

quantity is being determined. An unattended automated or customer operated weighing or measuring system is considered to represent the device/business owner in transactions involving an unattended device. (NIST Handbook 44 - 2002 Edition)

G-UR.3.3. Requires that "A device . . . used in direct sales. . . shall be positioned so that its indications may be accurately read and the weighing or measuring operation may be observed from some reasonable "customer" and "operator" position . . ." (emphasis added) The reasons for this requirement include, but are not limited to:

- customer confirmation of beginning scale indication (i.e. "zero")
- operator verification of load position (i.e. are all axles scale-borne? Is the operator in/out?)
- customer observation of scale indication(s)
- direct communication regarding the weighment operation(s)
- observation of dual direction positioning of the customer vehicle (i.e. weigh in/out)

### **Application**

MDARD W&M will apply the requirements of G-UR.2.2. and G-UR.3.3. to vehicle scale applications in the following manner:

1. In all cases, W&M must be notified of a device installation per the Placing in Service provisions of P.A. 283.
2. Effective July 1, 2002, the requirements of G-UR.2.2. and G-UR.3.3. will be in full force and effect for NEW INSTALLATIONS used in Direct Sales applications.
  - 2(a). Remote Indications - The location, number and size of remote indications will be dictated by the site configuration.
3. Proposed installations with accepted bids and/or otherwise in place prior to July 1, 2002, and used in Direct Sales will not be actively required to meet G-UR.3.3. (See #4)
4. Installations noted in #3 above will be evaluated on a case-by-case basis if a complaint alleging non-compliance with G-UR.2.2. and/or G-UR.3.3. is received.
5. Additional exemptions and/or application requirements may be considered in the future.