

## The Term “Face” Applies to Multiple Measuring Devices Addressed in NIST Handbook 44

There should be other NIST Handbook (HB) 44 measuring devices codes included in the brackets at the end of the Appendix D Definition (second meaning) of the term “face” on page D-13. Multiple permanent code sections specify that either the initial zero condition, the display of the unit price, or other marking information shall be posted or displayed on the/each “face” of the dispenser. There is only one code’s numerical designation that is referenced in the NIST HB 44 Appendix D definition of the term “face.” The current Appendix D definition of face gives the appearance the term only applies to devices addressed in HB 44 Section 3.30 Liquid Measuring Devices Code. The current definition of “face” and other applicable code section paragraphs were excerpted from the 2020 edition of HB 44 as shown below to illustrate this discrepancy:

<b>2020 Edition of NIST HB 44 Appendix D – Definitions: Face</b>
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<p><b>face.</b> – That portion of a computing-type pump or dispenser which displays the actual computation of price per unit, delivered quantity, and total sale price. In the case of some electronic displays, this may not be an integral part of the pump or dispenser. [3.30]</p>
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<p>(Added 1987)</p>
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The permanent HB 44 code sections where the initial zero condition, unit price, quantity, total price, and/or conversion factor are required to be part of the display on the face of the device are:

### 3.32 LPG and Anhydrous Ammonia Liquid-Measuring Devices

#### S.1.4. For Retail Devices Only.

**S.1.4.1. Indication of Delivery.** – A retail device shall automatically show on its **face** the initial zero condition and the quantity delivered up to the nominal capacity of the device. However, the following requirements shall apply:

- (a) For electronic devices manufactured prior to January 1, 2006, the first 0.03 L (or 0.009 gal) of a delivery and its associated total sales price need not be indicated.
- (b) *For electronic devices manufactured on or after January 1, 2006, the measurement, indication of delivered quantity, and the indication of total sales price shall be inhibited until the fueling position reaches conditions necessary to ensure that the delivery starts at zero.  
[Nonretroactive as of January 1, 2006]*

**S.1.5.1. Display of Unit Price and Product Identity.** – A device of the computing type shall display on each **face** the unit price at which the device is set to compute or to deliver, and there shall be conspicuously displayed on each side of the device the identity of the product that is being dispensed.

*Except for dispensers used exclusively for fleet sales and other price contract sales, all of the unit prices at which that product is offered for sales shall meet the following conditions:*

- (a) *For a system that applies a discount prior to the delivery, all unit prices shall be displayed or shall be capable of being displayed on the dispenser through a deliberate action of the purchaser prior to the delivery of the product. It is not necessary that all of the unit prices be simultaneously displayed prior to the delivery of the product.  
[Nonretroactive as of January 1, 2016]*
- (b) For a system that offers post-delivery discounts on fuel sales, display of pre-delivery unit price information is exempt from (a) above, provided the system complies with S.1.5.5. Recorded Representations for Transactions Where a Post-Delivery Discount(s) is Provided.

**Note:** When a product is offered at more than one unit price, display of the unit price information may be through the deliberate action of the customer: 1) using controls on the device; 2) through the customer's use of personal or vehicle-mounted electronic equipment communicating with the system; or 3) verbal instructions by the customer.

(Amended 2016)

#### **UR.2.7.1. Unit Price and Product Identity.**

- (a) The following information shall be conspicuously displayed or posted on the **face** of a retail dispenser used in a direct sale:
  - (1) except for unit prices resulting from any post-delivery discount and dispensers used exclusively for fleet sales, other price contract sales, and truck refueling (e.g., truck stop dispensers used only to refuel trucks), all of the unit prices at which the product is offered for sale; and
  - (2) in the case of a computing-type device or money-operated type device, the unit price at which the dispenser is set to compute.

Provided that the dispenser complies with S.1.5.1. Display of Unit Price and Product Identity, it is not necessary that all the unit prices be simultaneously displayed or posted.

(b) The following information shall be conspicuously displayed or posted on each side of a retail dispenser used in a direct sale:

(1) The identity of the product in descriptive commercial terms; and

(2) The identity of the grade, brand, blend, or mixture that a multi-product dispenser is set to deliver.

(Added 2016)

### 3.37. Mass Flow Meters

**S.2.5.1. Unit Price.** – A computing or money-operated device shall be able to display on each **face** the unit price at which the device is set to compute or to dispense.

(Added 1993)

**S.2.6.2. Display of Quantity and Total Price.** – When a delivery is completed, the total price and quantity for that transaction shall be displayed on the **face** of the dispenser for at least 5 minutes or until the next transaction is initiated by using controls on the device or other user-activated controls.

(Added 1993)

**S.2.8. Indication of Delivery.** – *The device shall automatically show on its **face** the initial zero condition and the quantity delivered (up to the nominal capacity). However, the first 0.03 L (0.009 gal) of a delivery and its associated total sales price need not be indicated.*

*[Nonretroactive as of January 1, 1998]*

(Added 1997)

**S.5.2. Marking of Equivalent Conversion Factors for Compressed Natural Gas.** – A device dispensing compressed natural gas shall have either the statement “1 Gasoline Gallon Equivalent (GGE) means 5.660 lb of Compressed Natural Gas” or “1 Diesel Gallon Equivalent (DGE) means 6.384 lb of Compressed Natural Gas” permanently and conspicuously marked on the **face** of the dispenser according to the method of sale used.

(Added 1994) (Amended 2016)

**S.5.3. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.** – A device dispensing liquefied natural gas shall have the statement “1 Diesel Gallon Equivalent (DGE) means 6.059 lb of Liquefied Natural Gas” permanently and conspicuously marked on the **face** of the dispenser according to the method of sale used.

(Added 2016)

**UR.3.1. Unit Price and Product Identity for Retail Dispensers.** – The following information shall be conspicuously displayed or posted on the **face** of a retail dispenser used in direct sale:

(a) except for dispensers used exclusively for fleet sales, other price contract sales, and truck refueling (e.g., truck stop dispensers used only to refuel trucks), all of the unit prices at which the product is offered for sale; and

(b) in the case of a computing type or money-operated type, the unit price at which the dispenser is set to compute.

(Added 1993)

**UR.3.1.1. Marking of Equivalent Conversion Factors for Compressed Natural Gas.** – A device dispensing compressed natural gas shall have either the statement “1 Gasoline Gallon Equivalent (GGE) means 5.660 lb of Compressed Natural Gas” or “1 Diesel Gallon Equivalent (DGE) means 6.384 lb of Compressed Natural Gas” permanently and conspicuously marked on the **face** of the dispenser according to the method of sale used.

(Added 2016)

**U.R.3.1.2. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.** – A device dispensing liquefied natural gas shall have the statement “1 Diesel Gallon Equivalent (DGE) means 6.059 lb of Liquefied Natural Gas” permanently and conspicuously marked on the **face** of the dispenser according to the method of sale used.

(Added 2016)

### 3.39 Hydrogen Gas-Measuring Devices Code

#### S.2.4. Display of Unit Price and Product Identity.

**S.2.4.1. Unit Price.** – A computing or money-operated device shall be able to display on each **face** the unit price at which the device is set to compute or to dispense.

**S.2.5.2. Display of Quantity and Total Price.** – When a delivery is completed, the total price and quantity for that transaction shall be displayed on the **face** of the dispenser for at least 5 minutes or until the next transaction is initiated by using controls on the device or other user-activated controls.

**S.2.7. Indication of Delivery.** – The device shall automatically show on its **face** the initial zero condition and the quantity delivered (up to the nominal capacity).

**UR.3.1. Unit Price and Product Identity for Retail Dispensers.** – The unit price at which the dispenser is set to compute shall be conspicuously displayed or posted on the **face** of a retail dispenser used in direct sale.

**Conclusion:** To correct an oversight NIST OWM submits a 2022 Form 15 proposal that recommends including references to NIST HB 44 Sections 3.32, 3.37, and 3.39 in the Appendix D definition of “face” to clarify the term is applicable to LPG, CNG, LNG, and gaseous hydrogen dispensers. The proposed modification to the definition of “face” would read:

face. – That portion of a computing-type pump or dispenser which displays the actual computation of price per unit, delivered quantity, and total sale price. In the case of some electronic displays, this may not be an integral part of the pump or dispenser. [3.30, **3.32, 3.37, and 3.39**]

(Added 1987)(**Amended 2022**)