

Weights and Measures Connection

Volume 2, Issue 6, September 26, 2011

Tare Verification

“Ensuring the Accuracy of Pre-Packaged Tare”

Byline David Sefcik

NIST Weights and Measures Division continues to hear about increased instances of short-weighing in retail food stores from state weights and measures officials. The number one problem related to short weighing of random weight pre-packaged product at retail is inaccurate tare. There are many reasons and causes for this, from system errors (transmission errors) and manual errors (data input, incorrect tare determination, communication errors from suppliers, incorrect tray selection) to changes in packaging materials.

Understanding that Weights and Measures programs have limited resources and time, we suggest using the “tare verification procedure,” an easy approach to identify problems with inaccurate tare. This will benefit both consumers and retailers by increasing the accuracy and understanding of proper tare.

The “tare verification procedure” involves checking unused dry tare at the store. Unused dry tare is all unused packaging materials (including tray, gel pads, wrapping, glue, labels, ties, etc.) that contain or enclose a product. It includes prizes, gifts, coupons, or decorations that are not part of the product.



The “tare verification procedure” involves collecting and determining the weight of unused random weight (e.g., store packed) dry tare materials in each merchandising department (i.e., meat, seafood, bakery). It is critical that the tare packaging material be created exactly as used in the packaging on the commodity. For example, if a product consists of a package that has a 5S tray, gel pad, poly wrap, scale label, and a special promotional label (i.e., “ready for the grill”), then all tare materials should be combined as one to determine the package tare. It is recommended that a minimum of 5 tare samples be collected, though 10 are ideal. **Weigh all the tare samples together then divide by the number of tare samples, rounding up the average, to determine the tare value.**



You can then compare the tare value you calculated to the actual tare programmed in the scale system, the actual manual tare being taken by the store, and/or the actual tare of the packaged product. You may choose to collect and sample all unused dry tare available in the store during a single visit, a sampling across departments, or take a department by department approach. Collection of samples should be done in each department where tare materials are used in the determination of net weight.

A simple form can be devised to capture and document your results. Weigh and record each individual tare weight (to show the variations between tare), then weigh all the tare samples together and divide by the number of tare samples, rounding up the average, to determine the tare value.

Store ____ Department ____ Date ____

Tare Description	Tare 1	Tare 2	Tare 3	Tare 4	Tare 5	Average Tare	Store Tare	Difference +/-
8S Foam Tray	0.0355 lb	0.0365 lb	0.0375 lb	0.0370 lb	0.0360 lb	0.036 lb	0.04 lb	+0.004 lb

Doing tare verification will save a great amount of time and effort while easily identifying problem items and areas. Results can then be presented to the store for correction before further inspections are performed. The tare inspection could be part of an official inspection, with findings documented to support a package inspection discovery, and could also be used for future civil or judicial proceedings.

For more information on this topic, see the 1.5 hour Webinar available on our website titled “Ensuring the Accuracy of Tare in Retail Stores”. The link is <http://www.nist.gov/pml/wmd/metric/tare-verification-webinar.cfm> This Webinar was developed for the retail industry at the suggestion of weights and measures officials. Officials have indicated that many of the retailers they have encountered could avoid problems if they were provided training on the legal requirements for selling on the basis of net weight and on good tare determination procedures.

The Webinar includes a brief review of:

- The legal requirements, importance, and the proper use of tare for selling on the basis of net weight.
- State Weights and Measures role and approach to inspections.
- The business case for ensuring accurate tare.
- The cost and value of tare including possible fines, penalties, negative publicity in the media, and multi- state investigation concerns.
- Common problems and how to avoid them using good quantity control processes.
- Routine checks and balances and examples of retailer best practices.
- How to read and respond to state weights and measures reports.

For more information please contact David Sefcik, dsefcik@nist.gov, (301) 975-4868.