

<b>Field Inspection Manual</b>	Part: <b>3-STP</b>	Section: <b>9</b>	Page: <b>1 of 2</b>
<b>Volumetric Measuring Devices</b>	Issued: <b>2004-03-01</b>	Revision Number: <b>Original</b>	

## **PERFORMANCE - AGREEMENT BETWEEN REGISTRATIONS TEST**

### **APPLICATION**

This test applies to any device that has more than one means or registration. These include primary indications, secondary indications, printers, totalizers and other recording means.

### **PURPOSE**

To determine if all available means of registration for an indicated quantity are in agreement with each other.

**LEGISLATIVE REFERENCES:** SVM.1-20, R.139, bulletin V-7, bulletin V-20, R.292, R.293, NoA.

Ensure that all means of visual indication and registration have the minimum number of digits and decimals required by SVM.1-20. Consult bulletin V-7 for electromechanical printers. Requirements for the minimum number of digits and decimals and for the agreement between means of registration apply to any means of indication or registration including print out from interfaced computers. Ensure that there is no defective digits. Consult also the Notice of Approval for special provisions regarding totalisers. They are not required to meet minimum increment requirements. The value of minimum increment of registration of totalisers and primary indicators may differ.

### **MECHANICAL OR ELECTRONIC TOTALIZERS ON DISPENSERS, REFUELLERS, VEHICLE MOUNTED METERS, ETC.**

These totalizers are used to keep a record of the total quantities delivered by devices. They are used for inventory control purpose, mainly. Although not normally considered a trade device, the totalizer is sometimes used in trade between wholesalers and retailers. For instance, service station retailers pay to the wholesaler for the gasoline sold on the basis of totalizer readings. Totalizers are inspected on a complaint basis only if they are used in trade.

### **CARD CONTROL OR KEY OPERATED SYSTEMS**

Card control and key lock totalisers are found on refuellers (truck stop) or on loading rack meters (self-served loading plants). Each customer has its own dedicated key-totalizer or electronic card-file that keep track of the quantity purchased. Usually, customers are billed periodically, for instance once a month.

Card control or key operated systems are considered to be the same as a remote indicator and must be tested. Normally only one totalizer in the bank can be tested during the inspection.

A customer using a key or card controlled system must be able to view the advance of his totalizer or must have access to a printed receipt for each delivery as required by Sections 292 and 293 of the *Weights and Measures Regulations*.

<b>Field Inspection Manual</b>	Part: <b>3-STP</b>	Section: <b>9</b>	Page: <b>2 of 2</b>
<b>Volumetric Measuring Devices</b>	Issued: <b>2004-03-01</b>	Revision Number: <b>Original</b>	

## PERFORMANCE - AGREEMENT BETWEEN REGISTRATIONS TEST

### PROCEDURE

For key totalisers or card operated systems, obtain a key or card to access at least one totalizer in the system. Record the totalizer readings before and after any accuracy test or delivered quantity. The totalizer must advance by the volume indicated on the main register face for any delivered quantity. As the minimum increment of registration of totalizers may be larger than the minimum increment of registration of primary registration, larger quantities of product may have to be circulated in order to be able to assess the agreement.

Following any flow test, print a ticket at least once and compare its value with the visual indication.

Check all indicators for agreement with each other.

A measuring machine with two indicator faces (gasoline dispenser) should be checked for agreement at the start and stop of a test.

**NOTE:** On self-serve dispensers, the cashier's console and printer are considered to be a secondary indicator and must agree, within allowable limits, with the primary indicator located on or adjacent to the dispenser.

**NOTE:** Devices equipped with printers and the automatic temperature compensator function enabled, must show the statement that the volume is corrected to 15°C in a format as outlined in Section 295 of the *Regulations*.

**NOTE:** The Volume Correction statement is not required on the printed tickets for refuellers and fuel dispensers. Reference Measurement Canada Volume Bulletin V-20

### INTERPRETATION OF RESULTS

Exact agreement is required between electronic digital means of registration having the same minimum increment.

Electronic digital means of registration that do not have the same value of minimum increment are required to be in agreement within 0.6 times the largest of those values of minimum increment of registration

Consult Section 139 of the *Weights and Measures Regulations* for other types or combinations of means of registration.

**NOTE:** In the case of a dispenser or a refueller inspected on a complaint basis, if the reading of the totalizer differs from that of the main register by a value exceeding the tolerances, the dispenser should not be verified.

### REVISION

Original document