STP-20 ACCURACY OF PRICE COMPUTATION

REFERENCE
Sections 19, 31, 46, 47, 66 and 67 of the Non Automatic Weighing Devices Specifications.

PURPOSE
This test is to ensure that price computations are accurate and properly rounded off to the nearest cent; that printing devices provide the minimum required information; and that the scale has been configured in accordance with the requirements. This test is performed on any computing scales and POS systems.

BEFORE PERFORMING THE TEST, THE INSPECTOR ENSURE THAT:
-the unit price is printed when the total price is printed;
-the displayed and recorded monetary values are readable, clear and defined by appropriate words or symbols.

DEVICES INTENDED FOR DIRECT SALE TO THE PUBLIC
-the device displays the unit price when the total price is displayed;
-the device can only display unit prices on the basis of price/100 g and price/kg, when it measures in kilograms;
-the device can only display unit prices on the basis of price/pound when it measures in pounds.

OTHER REQUIREMENTS
-the Total Price Display Unit has enough digits to indicate the computed total price on the basis of the maximum load that the device can weigh multiplied by the maximum value of unit price that it can accept;

-when the displayed weight is less that zero, the device is not capable of displaying or printing a computed total price. Place a small load on the platter, tare it and remove it from the platter. A negative weight value should be displayed. It should not be possible to display or print unit and total price values;

-when the device indicates an overcapacity condition, it can not display or print a weight or a computed total price;

FREE FLOATING WEIGHT AND TOTAL PRICE SIGNALS
The displayed weight and total price is free floating; that is, when displayed unit price or weight is changed, the total price is changed accordingly.

ROUNDING RULES
Total prices must be rounded off to the neareast cent. Perform the following test:

PROCEDURE
-Apply several loads to the scale and enter different prices.
-With a calculator determine the correct values, round them off to the appropriate decimal, and compare them to the total price indicated by the scale.

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The following are suggested loads and unit prices for computing scales:

Test #	Net Weight	Unit Price	Total Price	Correct Indication
A	0.01	$4.54	$0.045 40	$0.05
B	0.01	$4.55	$0.045 50	$0.05
C	0.01	$4.90	$0.049 00	$0.05
D	0.01	$5.10	$0.051 00	$0.05
E	0.01	$2.50	$0.025 00	$0.02 or $0.03
F	0.01	$2.51	$0.025 10	$0.03
G	0.651	$0.76	$0.494 76	$0.49
H	0.652	$0.76	$0.495 52	$0.50

Apply the following rounding rule:

Computed Results	Correct Indication
0.020	0.02
0.021	0.02
0.022	0.02
0.023	0.02
0.024	0.02
0.025 0	0.02 or 0.03
0.025 1	0.03

INTERPRETATION OF RESULTS
The device complies with the requirements if all computed total prices are exact and rounded off as per the rule illustrated.

REVISION
Original document