

Standard Operating Procedure: SOP-BALL-4

## Total Weight of a Bowling Ball

<u>Rev</u>	<u>Date</u>	<u>Staff Member</u>	<u>Purpose</u>
3	11/13/19	A. Stanton	Added calibration/verification procedure
2	1/14/14	T. Frenzel	Rewrite for clarification
1	02/12/09	N. Mours	rewrite for clarification
Origination date: 10/29/07		Originator: T. Robben	

**Purpose:** To determine the total weight of a bowling ball.

**Materials:**

- Bowling ball to be tested
- Digital scale with bowling ball holder (ball cup)

**Procedure:**

1. Supply power to the digital scale.
2. Place ball cup on the scale and zero the balance.
3. Gently place the bowling ball on the scale.
4. Read the total weight of the bowling ball in pounds from the digital display on the scale.

**If ball results indicate the weight of the ball is out of spec:**

1. Verify that the scale is operating correctly by placing 3 known 5 Lb. weights on the scale measuring a total of 5 pounds, 10 pounds and 15 pounds. The results should fall within  $\pm.002$  pounds.
2. If the results are within the  $\pm.002$  Lb. tolerance, the scale and data are good.
3. If scale fails to match the known weight values, recalibrate using the instructions in the calibration section below.

**USBC Calibration**

1. The scale must be powered OFF. Press and hold [MODE] and [ ]. Release both keys and wait for the display to read “CALE”.
2. Place a 5 kg weight on the platform. Wait a few seconds, then press [TARE]. Calibration is complete when the display reads “PASS”. Now you can remove the weights.
3. Turn the scale OFF then turn it back ON and check some weight readings (5 kg). If calibration is still incorrect, repeat calibration.

**Yearly Calibration:**

This scale is to be professionally calibrated every 6 months by a technician from Mettler Toledo.