

IN-HOUSE PROCEDURE # _____

PROCEDURE FOR CALIBRATION OF
SCALES OR BALANCES
(AASHTO M 231)

Purpose:

This procedure provides instructions for checking the accuracy of scales and balances.

Inspection Equipment

1. Standard Weight Set of sufficient mass to reach 90% of scales capacity.
2. A level is required to check the scale's level position, if one is not built into the unit.

Procedure:

1. Turn electronic scales on allowing for a warm up of approximately 30 minutes.
2. Ensure that the scale base is seated on all comers and is level. (NOTE: Some leveling devices are located under the scale pan.
3. Be aware of *excessive* air movement during the calibration process. Document if air movement appears to be excessive.
4. Check for Off-Center Error. Measure this effect by placing the load (90 % of capacity) at various positions on the pan and observe any differences in indication. The difference between the lowest and the highest indication is the maximum Off-Center Error, which should be within the accuracy range listed for the class of scale being checked.
5. Set the zero point and the full-scale indication. Place weights on the pan in increasing increments as indicated on calibration form. Observe and record the indications. The difference at any point is the inaccuracy.