

WORKSHEET C-1W

AIR METERS (PRESSURE TYPE)

REQUIREMENTS: Standardize			
Standardization Frequency	Last Standardization	Date of Standardization	Next Standardization
3 Months			

GAGELIST ID: _____

ASSET ID: _____

SERIAL NUMBER: _____

MODEL NUMBER/MANUFACTURER: _____

STANDARDIZATION REFERENCE: PROCEDURE C-1; ASTM/AASHTO C231/T152

TRACEABLE MEASURING AND TEST EQUIPMENT USED FOR STANDARDIZATION:

Equipment Name	Serial or ID Number
Balance (0.1 lb)	
Thermometer (0.5 °C)	
24" Steel Ruler (0.01")	
1/4" Glass Plate	
Caliper (0.001")	

STANDARDIZATION TABLE:

- | | <i>Measurement</i> | <i>Tolerance</i> |
|---|--------------------|-------------------------|
| 1. Dimensions of Bowl: | | |
| a. Inside Diameter, in.: | _____ | |
| b. Inside Height, in.: | _____ | |
| c. Inside Diameter / Height Ratio, in.: | _____ | ≥ 0.75 to 1.25 x height |
| d. Capacity of Bowl, ft ³ : $\{\pi \times (\text{diameter} \div 2)^2\} \times \text{height}$ | _____ | ≥ 0.20 ft ³ |
| 2. Appendix A1.2 – Calibration of the Calibration Vessel, w: | | |
| a. Weight of calibration vessel, g: | _____ | |
| b. Weight of calibration vessel and water, g: | _____ | |
| c. Weight of water, w, required to fill the calibration vessel, g: | _____ | |
| 3. Appendix A1.3 – Calibration of the Measuring Bowl: | | |
| a. Weight of the measuring bowl, g: | _____ | ≥ 0.75 to 1.25 x height |
| b. Weight of the measuring bowl and glass plate, g: | _____ | |
| c. Weight of the measuring bowl, glass plate and water, g: | _____ | |
| d. Weight of water, W, required to fill the measuring bowl, g: | _____ | |
| e. Weight of water in pounds (W ÷ 453.59), lbs: | _____ | |
| f. Temperature of water, °C: | _____ | |
| g. Unit weight of water, pcf: | _____ | |
| h. Volume of the measuring bowl, ft ³ (W ÷ unit weight of water): | _____ | |
| 4. Appendix A1.5.2 and A19 – Confirming/Adjusting Initial Pressure: | _____ | Reading for 0.0 % |
| 5. Appendix A1.4 – Effective Volume of the Calibration Vessel, R: | | |
| a. $R = w \div W$ | _____ | ± 0.1 % |
| 6. Appendix A1.6 – Calibration Reading, K: | | |

Weight of Water Withdrawn, g	Theoretical Gauge Reading, % A	Actual Gauge Reading, % B	Deviation Between (A) & (B) must be within 0.1 % $C = (B - A) \div A$

a. A1.6.2 – For Type B, $K = R$ IP = _____

7. Appendix A1.9 – **Calibration Test to Check the Air Content Graduations on the Pressure Gauge, Type B Meter:**

RESULTS:

Equipment Status Upon Receipt: Conforms _____ Nonconforming* _____

* Who Was Notified? _____ Corrective Action _____

Equipment Status After Adjustment: Conforms _____ Nonconforming _____

Standardization Performed By: _____ Standardization Checked By: _____