

Procedure Checklist

FM 5-507 Determination of Moisture Content by means of a Calcium Carbide Gas Pressure Moisture Tester (Speedy Method)

Evaluation Date:		IA Evaluator:	
¹ Qualification Area:		Technician Name:	
² Evaluation Type:		Technician's Email:	
		Supervisor's Name:	
Evaluation District:	³ Tech. Type:	Supervisor's Email:	

		P	F	N/A
Participation				
1.	The technician participated in evaluation (technician refused to participate equals failure).			
General				
2.	Balance scale recalibrated as needed and checked at least daily using weights totaling 20 or 26 grams, depending on the tester used.			
3.	Speedy is clean and dial is on zero prior to testing.			
4.	The correct amount of reagent is placed in the body of the tester.			
5.	Sample that represents the entire depth from the area underneath the nuclear density gauge is placed in moisture-proof container.			
6.	Material is sieved using a No. 4 US sieve to remove large particles (only for coarse aggregates).			
7.	Balance scale is level and stable, protected from the sun and wind, and tared prior to weighing sample.			
8.	The representative sample is thoroughly mixed and weighs 20 or 26 grams, depending on the type of tester used.			
9.	Sample is placed in cap.			
10.	Tester is held horizontally, steel balls inserted, cap replaced, and steel balls placed in orbit.			
11.	Appropriate testing time is used based on material being tested; at least 1 minute for sands/light granular/coarse materials and 3 minutes for heavy clay materials.			
12.	Tester is shaken again for an additional 30 seconds, dial is checked again, and process is repeated until the needle stops moving.			
13.	Final reading taken while tester is horizontal at eye level and after the dial is stabilized.			
14.	Percent moisture is adjusted using the appropriate conversion chart.			
15.	Tester cap is opened away from the operator post-testing.			
16.	Sample is examined for lumps and if lumps are present, a second sample is tested.			
17.	Cap and washer are cleaned with cloth.			
18.	Body of tester is cleaned with brush.			

Remarks: _____

Notes:
 1 ECI Level I, ECI Level II
 2 IA Observation, IA Split, IA Split/IA Observation
 3 IA, QC, QC/VT, VT