Gyratory Compactor Calibration Worksheet

Equipment ID:		Date:	
Manufacturer:		Performed By:	
Model #:		Last Calibration:	
Serial #:		Next Calibration Due:	
Storage Location:			

Calibration Item:	Verify internal angle, pressure, gyration speed and height measurement	
Calibration Procedure:	In-House Procedure for Verifying Gyratory Compactor	
Calibration Equipment:	Internal Angle Device	*ID:*
	Proving Ring/Load Cell	*ID:*
	Timer	*ID:*
	Height Calibration Block(s)	*ID:*
	Gyratory Mold	*ID:*
	Gyratory End Plate(s)	*ID:*

INTERNAL ANGLE

Calibrated Static Angle	Measurement	Specification	Pass / Fail
Static Angle Reading 1		± 0.01° of calibrated angle	☐ Pass ☐ Fail
Static Angle Reading 2			☐ Pass ☐ Fail
Static Angle Reading 3			☐ Pass ☐ Fail

Top Internal Angle 1	a			
Top Internal Angle 2	b			
Bottom Internal Angle 1	c			
Bottom Internal Angle 2	d			
Effective Internal Angle			1.16 ± 0.02 °	☐ Pass ☐ Fail

$$Effective\ Internal\ Angle = \frac{Average\ Top + Average\ Bottom}{2}$$

PRESSURE	Target	Measurement	Tolerance ± 3 %	Pass / Fail
5000 N				☐ Pass ☐ Fail
10,500 N				☐ Pass ☐ Fail

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GYRATION SPEED	Measurement	Tolerance	Pass / Fail
Number of Gyrations			
Time (seconds)			
Gyration Speed		30 ± 0.5 per minute	☐ Pass ☐ Fail

$$Gyration\ Speed = \frac{Number\ of\ Gyrations}{\frac{Time\ (seconds)}{60}}$$

HEIGHT

Target Measurement	Measurement	Tolerance	Pass / Fail
		± 0.004 in. (± 0.1 mm)	☐ Pass ☐ Fail

Pass / Fail _____

Initial By _____