

Customer		Contact			
Material	Proprietary Diamond powder and "Binder"	Est. Bulk Density (gm/cc)	rh		Date
Desired Sample size	.5 gm to 6 gm	.6 - 8	55%		3/15/2006
Desired accuracy	1.5% Repeatability of samples at various settings over pipette length			Pipette Size	0.500

Micrometer setting

0.12

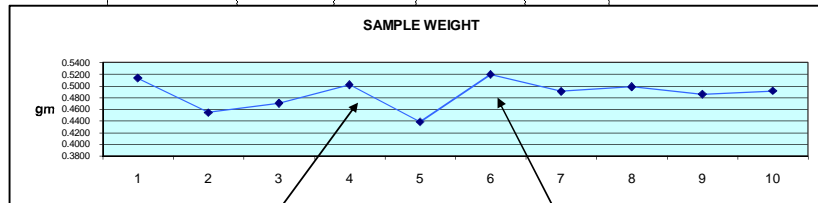


Sample weight
gm

0.5135
0.4546
0.4706
0.5019
0.4386
0.5196
0.4907
0.4985
0.4858
0.4916

Control unit settings
Vacuum (in hg) Air (psi)

24 15



Tap Density decreased due to large particles (Entrained air) particle size in mix.

Tap Density increased due to smaller particle size in

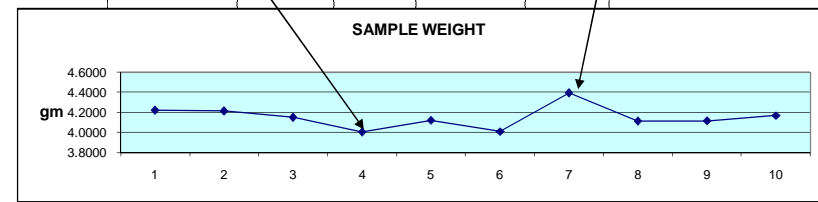
1.40



Max vol.

4.2250
4.2180
4.1550
4.0098
4.1250
4.0150
4.3970
4.1173
4.1203
4.1720

24 15



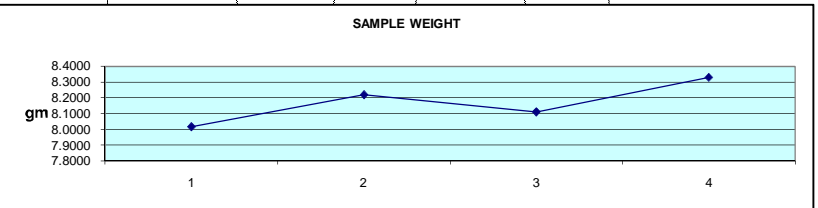
4.1554 Av
4.1541 Mean
0.1115 Std Dev

Special pipette
oversize

Note 5

8.0180
8.2200
8.1120
8.3300
7.9970

24 5



8.1354 Av
8.1692 Mean
0.1349 Std Dev

Notes:

- Customer supplied diamond/binder powder was comprised of diamond fines to <5 micron to 2.5 mm. 2 mm for "other" powder had approx 10% fines <20 micron.
- Samples taken at random throughout supply vessel. Would expect more uniform sample sizes if a larger amount of material is in the supply vessel.
- Suggest sharp edge or wire to level tip end for small samples, especially at the smaller samples.
- Larger samples were more uniform using the scraper plate.