

Gage Study
 Date: Oct 10, 2019 Model No. 925 Reference Material: Pattern Glass 0.700-0.750
 Observer:

Sample	Operator	N	E	S	W	Average	Range	Sample	Operator	N	E	S	W	Average	Range	Sample	Operator	N	E	S	W	Average	Range	
1)	1)	0.714	0.75	0.727	0.702	0.72325		1)	1)	0.725	0.711	0.701	0.701	0.7095		1)	1)	0.724	0.716	0.745	0.742	0.73175		
	2)	0.715	0.73	0.71	0.721	0.719	0.00425		2)	0.728	0.725	0.741	0.725	0.72975	0.02025		2)	2)	0.717	0.734	0.724	0.741	0.729	0.00275
2)	1)	0.717	0.724	0.711	0.743	0.72375		2)	1)	0.74	0.744	0.733	0.703	0.73		2)	1)	0.719	0.724	0.732	0.729	0.726		
	2)	0.736	0.711	0.741	0.731	0.72975	0.006		2)	0.715	0.708	0.73	0.706	0.71475	0.01525		2)	2)	0.722	0.727	0.736	0.723	0.727	0.001
3)	1)	0.737	0.714	0.747	0.733	0.728		3)	1)	0.726	0.715	0.711	0.714	0.7165		3)	1)	0.705	0.749	0.724	0.716	0.7235		
	2)	0.719	0.721	0.726	0.722	0.722	0.006		2)	0.724	0.73	0.702	0.727	0.72075	0.00425		2)	2)	0.746	0.742	0.748	0.717	0.73825	0.01475
4)	1)	0.71	0.716	0.721	0.73	0.71925		4)	1)	0.715	0.73	0.717	0.724	0.7215		4)	1)	0.734	0.724	0.741	0.748	0.73675		
	2)	0.726	0.729	0.712	0.729	0.724	0.00475		2)	0.711	0.743	0.719	0.724	0.72425	0.00275		2)	2)	0.737	0.721	0.711	0.722	0.72275	0.014
5)	1)	0.734	0.736	0.722	0.744	0.734		5)	1)	0.716	0.726	0.722	0.71	0.7185		5)	1)	0.748	0.735	0.745	0.711	0.73475		
	2)	0.726	0.736	0.715	0.75	0.73175	0.00225		2)	0.726	0.729	0.712	0.729	0.724	0.0055		2)	2)	0.737	0.744	0.748	0.74	0.74225	0.0075

Sum Trib. A Op 1=	3.62825	Avg R Trib. A=	0.00465	Sum Trib. B Op 1=	3.596	Avg R Trib. B=	0.0096	Sum Trib. C Op 1=	3.65275	Avg R Trib. C=	0.008
Sum Trib. A Op 2=	3.6265			Sum Trib. B Op 2=	3.6135			Sum Trib. C Op 2=	3.65925		
Sum Trib. A=	7.25475			Sum Trib. B=	7.2095			Sum Trib. C=	7.312		
Avg Trib. A=	0.725475			Avg Trib. B=	0.72095			Avg Trib. C=	0.7312		

Measurement Values

Avg Trib. A =	0.725475
Avg Trib. B =	0.72095
Avg Trib C =	0.7312
Overall Avg =	0.725875
Max Avg =	0.7312
Min Avg =	0.72095
Avg Dif =	0.01025

Lower Control Limit = 0.715602
 Average = 0.725875
 Upper control Limit = 0.736148

Standard Deviation = 0.005137

Measurement Range

Avg R Trib. A =	0.00465
Avg R Trib. B =	0.0096
Avg R Trib. C =	0.008
Sum Avg R =	0.02225
Overall Avg R =	0.007417
Upper Ctrl Limit R=	0.024253

Gage R & R Results

Operator Variation (O.V.)	0.03382
Tribometer Variation (T.V.)	0.027623
Repeat. & Reproduc. (R&R)	0.034583
% O.V.	0.6764
% T.V.	0.55246
% R&R	0.981612
Critical Value for % R&R < 5%	

Status: Pass Fail