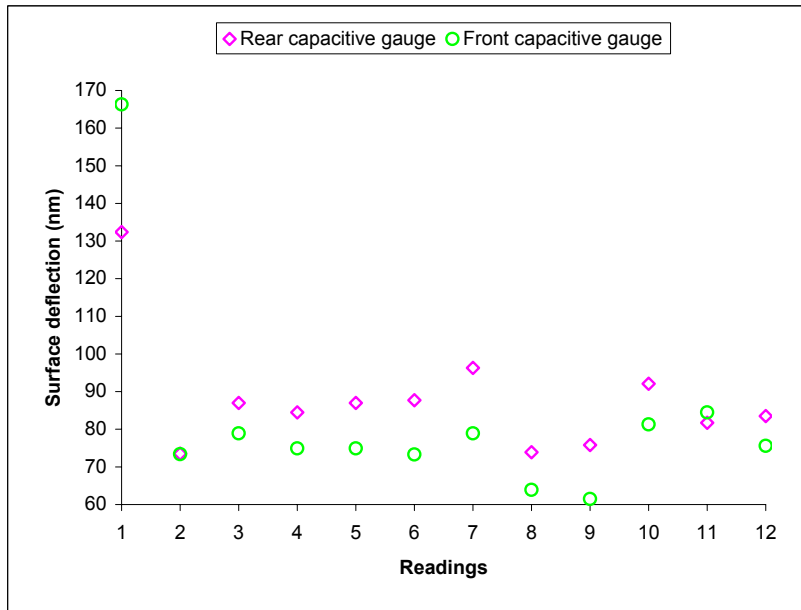


SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St1* SURFACE USING 35g DEAD-WEIGHT

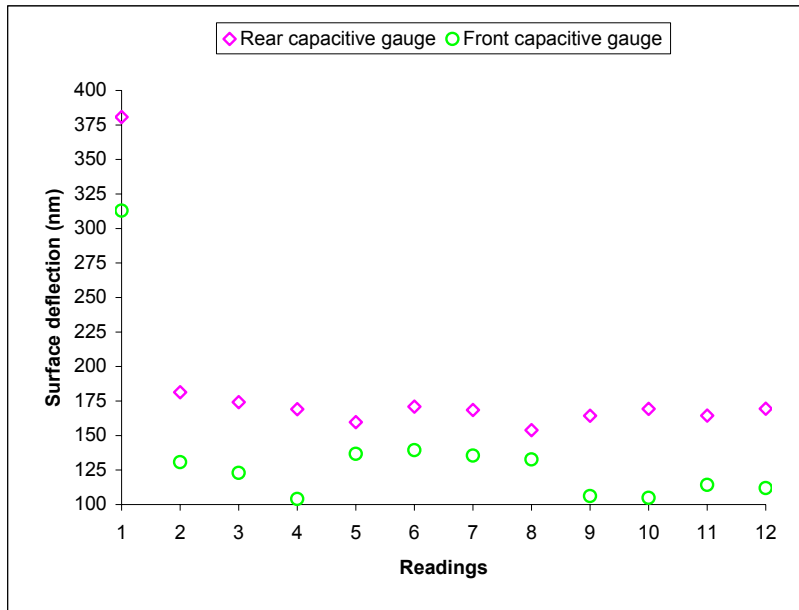
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	0.98217	1.09383	6.39605	6.38751	6.64125	6.63117	30.874	132.4	166.3	149.4
2	0.99624	1.09316	6.39361	6.38887	6.62579	6.62134	26.798	73.5	73.4	73.5
3	0.99776	1.09257	6.39273	6.38712	6.62553	6.62075	26.215	87.0	78.9	83.0
4	0.99745	1.09285	6.39248	6.38703	6.61649	6.61195	26.378	84.5	74.9	79.7
5	1.00037	1.09316	6.39233	6.38672	6.61133	6.60679	25.657	87.0	74.9	81.0
6	0.99999	1.09260	6.39242	6.38676	6.60608	6.60164	25.607	87.7	73.3	80.5
7	1.00005	1.09277	6.39296	6.38675	6.60739	6.60261	25.637	96.3	78.9	87.6
8	1.00013	1.09294	6.39180	6.38703	6.60198	6.59811	25.662	73.9	63.9	68.9
9	1.00030	1.09210	6.39158	6.38669	6.60307	6.59934	25.383	75.8	61.5	68.7
10	1.00010	1.09253	6.39156	6.38562	6.60222	6.59729	25.557	92.1	81.3	86.7
11	1.00032	1.09301	6.39139	6.38612	6.60120	6.59608	25.629	81.7	84.5	83.1
12	1.00115	1.09252	6.39179	6.38640	6.60050	6.59592	25.264	83.5	75.6	79.6
								83.9	74.3	



RESULTS OF LAST SIX READINGS			
25.522	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	79.1
		<i>and its standard devia.</i>	8.5

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St1* SURFACE USING 55g DEAD-WEIGHT

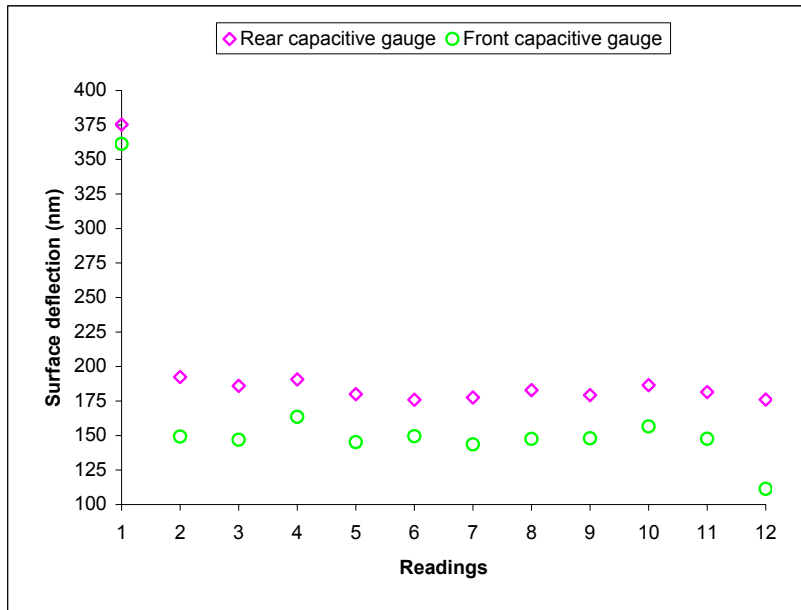
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	0.97380	1.17081	6.42372	6.39915	6.62584	6.60687	54.473	380.8	313.0	346.9
2	1.00999	1.16971	6.40670	6.39500	6.61011	6.60219	44.163	181.4	130.7	156.1
3	1.01003	1.16822	6.40540	6.39416	6.60894	6.60149	43.740	174.2	122.9	148.6
4	1.01150	1.16967	6.40378	6.39287	6.60744	6.60113	43.734	169.1	104.1	136.6
5	1.01056	1.16966	6.40636	6.39606	6.61106	6.60277	43.991	159.7	136.8	148.3
6	1.00902	1.17018	6.40639	6.39536	6.61064	6.60219	44.561	171.0	139.4	155.2
7	1.00740	1.17102	6.40708	6.39621	6.61134	6.60313	45.241	168.5	135.5	152.0
8	1.01040	1.16896	6.40454	6.39461	6.60978	6.60174	43.842	153.9	132.7	143.3
9	1.01184	1.16867	6.40387	6.39327	6.60748	6.60105	43.364	164.3	106.1	135.2
10	1.01179	1.16771	6.40344	6.39252	6.60748	6.60112	43.112	169.3	104.9	137.1
11	1.01129	1.16883	6.40323	6.39262	6.60690	6.59997	43.560	164.5	114.3	139.4
12	1.01118	1.16767	6.40320	6.39227	6.60675	6.59997	43.270	169.4	111.9	140.7
								165.0	117.6	



RESULTS OF LAST SIX READINGS			
43.732	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	141.3
		<i>and its standard devia.</i>	6.0

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St1* SURFACE USING 75g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	0.97450	1.24413	7.11112	7.08691	7.24607	7.22417	74.553	375.3	361.3	368.3
2	1.00430	1.24551	7.09699	7.08458	7.23165	7.22260	66.695	192.4	149.3	170.9
3	1.00632	1.24411	7.09608	7.08408	7.23151	7.22260	65.749	186.0	147.0	166.5
4	1.00710	1.24310	7.09659	7.08429	7.23240	7.22249	65.254	190.6	163.5	177.1
5	1.00857	1.24327	7.09575	7.08414	7.23124	7.22244	64.895	180.0	145.2	162.6
6	1.00898	1.24377	7.09502	7.08367	7.23133	7.22227	64.920	175.9	149.5	162.7
7	1.00935	1.24359	7.09494	7.08348	7.23149	7.22279	64.768	177.6	143.6	160.6
8	1.00838	1.24289	7.09465	7.08285	7.23114	7.22220	64.842	182.9	147.5	165.2
9	1.00970	1.24304	7.09472	7.08315	7.23108	7.22211	64.519	179.3	148.0	163.7
10	1.00798	1.24306	7.09457	7.08254	7.23184	7.22235	65.000	186.5	156.6	171.6
11	1.00933	1.24285	7.09445	7.08274	7.23117	7.22222	64.569	181.5	147.7	164.6
12	1.01063	1.24316	7.09460	7.08324	7.23123	7.22448	64.295	176.1	111.4	143.8
								180.7	142.5	

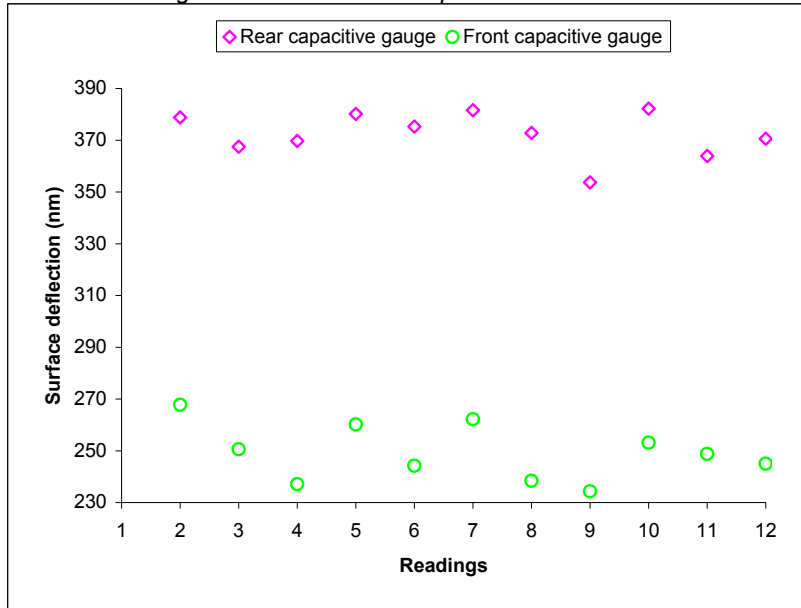


RESULTS OF LAST SIX READINGS			
64.666	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	161.6
		<i>and its standard devia.</i>	9.4

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St1* SURFACE USING 95g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.01109	1.36277	7.48182	7.41555	7.68199	7.62171	97.240	1027.2	994.6	1010.9
2	1.03200	1.36434	7.43494	7.41050	7.63346	7.61723	91.892	378.8	267.8	323.3
3	1.03275	1.36462	7.43279	7.40908	7.63177	7.61658	91.762	367.5	250.6	309.1
4	1.03695	1.36581	7.43173	7.40788	7.63094	7.61657	90.930	369.7	237.1	303.4
5	1.02415	1.36373	7.43217	7.40764	7.63273	7.61696	93.894	380.2	260.2	320.2
6	1.02711	1.36461	7.43149	7.40728	7.63175	7.61695	93.319	375.3	244.2	309.8
7	1.02647	1.36402	7.43091	7.40629	7.63110	7.61521	93.333	381.6	262.2	321.9
8	1.02876	1.36463	7.42995	7.40590	7.62962	7.61517	92.868	372.8	238.4	305.6
9	1.02722	1.36493	7.42928	7.40646	7.62913	7.61493	93.377	353.7	234.3	294.0
10	1.02826	1.36536	7.42903	7.40437	7.62916	7.61382	93.209	382.2	253.1	317.7
11	1.02887	1.36422	7.42767	7.40419	7.62827	7.61319	92.725	363.9	248.8	306.4
12	1.02811	1.36425	7.42771	7.40380	7.62751	7.61266	92.943	370.6	245.0	307.8
								370.8	247.0	

The first readings are not shown in this plot

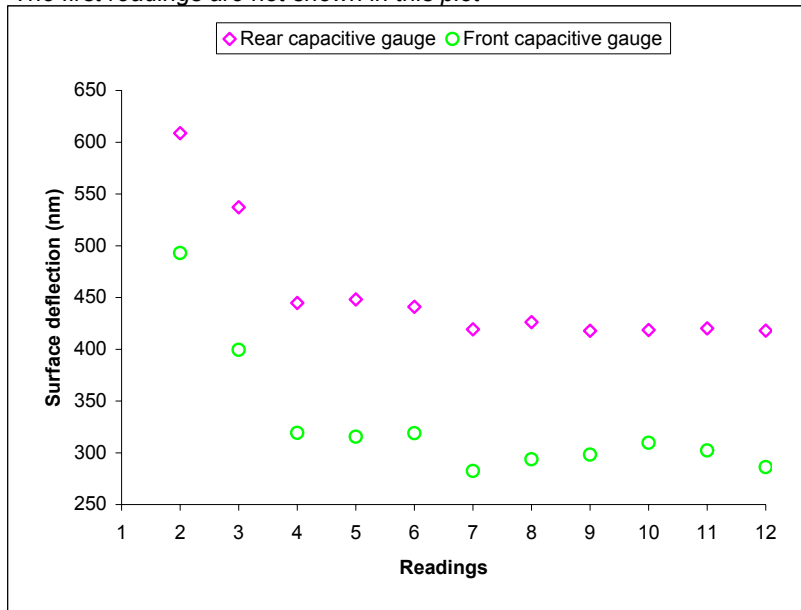


RESULTS OF LAST SIX READINGS			
93.076	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	308.9
		<i>and its standard devia.</i>	9.9

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St1* SURFACE USING 115g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.01415	1.43455	6.47035	6.29057	6.71872	6.54572	116.241	2786.6	2854.5	2820.6
2	1.02425	1.42854	6.31769	6.27841	6.55738	6.52751	111.787	608.8	492.9	550.9
3	1.02485	1.42626	6.29891	6.26426	6.54445	6.52024	110.990	537.1	399.5	468.3
4	1.02599	1.42664	6.29033	6.26163	6.53475	6.51540	110.780	444.8	319.3	382.1
5	1.02644	1.42700	6.28766	6.25875	6.53252	6.51340	110.755	448.1	315.5	381.8
6	1.02601	1.42741	6.28284	6.25439	6.52818	6.50885	110.988	441.0	318.9	380.0
7	1.02823	1.42568	6.27955	6.25250	6.52486	6.50774	109.895	419.3	282.5	350.9
8	1.02490	1.42666	6.27918	6.25168	6.52356	6.50576	111.087	426.2	293.7	360.0
9	1.02704	1.42759	6.27685	6.24989	6.52371	6.50564	110.753	417.9	298.2	358.1
10	1.02649	1.42712	6.27621	6.24920	6.52287	6.50410	110.775	418.7	309.7	364.2
11	1.02661	1.42599	6.27514	6.24804	6.52113	6.50281	110.429	420.1	302.3	361.2
12	1.02787	1.42886	6.27374	6.24677	6.52046	6.50312	110.874	418.0	286.1	352.1
								420.0	295.4	

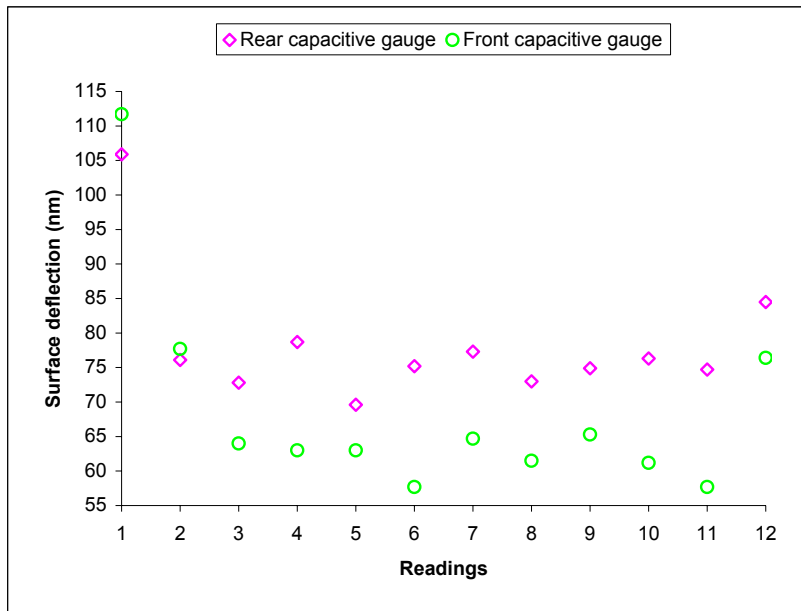
The first readings are not shown in this plot



RESULTS OF LAST SIX READINGS			
110.636	Ave. change of load	Ave. resultant deflec.	357.7
		and its standard devia.	5.3

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St2* SURFACE USING 35g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.18148	1.29233	7.08906	7.08223	6.91599	6.90922	30.650	105.9	111.7	108.8
2	1.22223	1.29535	7.09069	7.08578	6.91263	6.90792	20.218	76.1	77.7	76.9
3	1.22153	1.29607	7.08205	7.07735	6.91281	6.90893	20.610	72.8	64.0	68.4
4	1.22294	1.29622	7.08199	7.07691	6.91248	6.90866	20.262	78.7	63.0	70.9
5	1.22334	1.29611	7.08188	7.07739	6.91266	6.90884	20.121	69.6	63.0	66.3
6	1.22250	1.29521	7.08168	7.07683	6.91222	6.90872	20.104	75.2	57.7	66.5
7	1.22369	1.29520	7.08134	7.07635	6.91206	6.90814	19.773	77.3	64.7	71.0
8	1.22356	1.29576	7.08085	7.07614	6.91169	6.90796	19.963	73.0	61.5	67.3
9	1.22313	1.29587	7.08083	7.07600	6.91215	6.90819	20.113	74.9	65.3	70.1
10	1.22380	1.29509	7.08082	7.07590	6.91177	6.90806	19.712	76.3	61.2	68.8
11	1.22350	1.29495	7.08070	7.07588	6.91165	6.90815	19.756	74.7	57.7	66.2
12	1.22387	1.29568	7.08127	7.07582	6.91271	6.90808	19.856	84.5	76.4	80.5
								76.8	64.5	

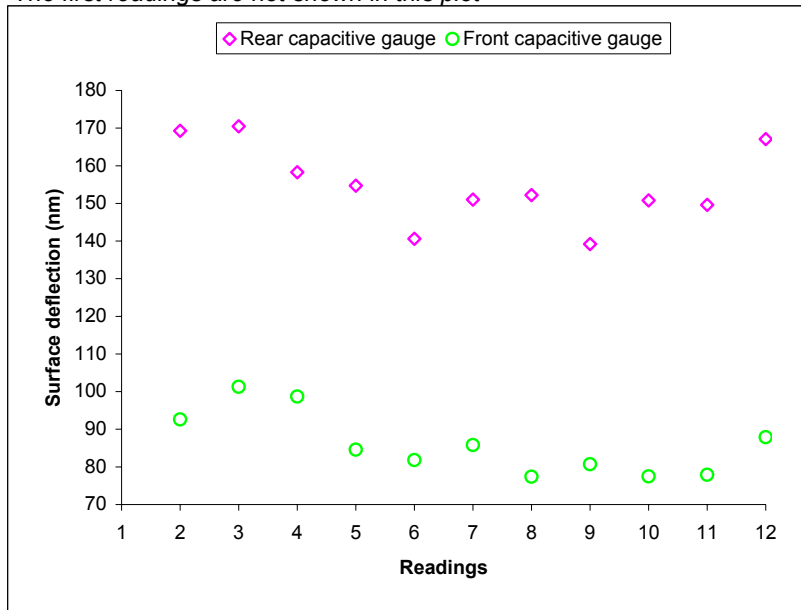


RESULTS OF LAST SIX READINGS			
19.862	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	70.6
		<i>and its standard devia.</i>	5.1

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St2* SURFACE USING 55g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.18449	1.36130	6.89903	6.86821	6.74305	6.71821	48.888	477.7	409.9	443.8
2	1.22828	1.35981	6.87800	6.86708	6.72300	6.71739	36.368	169.3	92.6	131.0
3	1.22974	1.35900	6.87745	6.86645	6.72305	6.71691	35.741	170.5	101.3	135.9
4	1.23258	1.35974	6.87666	6.86645	6.72257	6.71659	35.160	158.3	98.7	128.5
5	1.23449	1.35932	6.87639	6.86641	6.72242	6.71729	34.516	154.7	84.6	119.7
6	1.23437	1.35810	6.87627	6.86720	6.72221	6.71725	34.211	140.6	81.8	111.2
7	1.23487	1.35910	6.87585	6.86611	6.72208	6.71688	34.350	151.0	85.8	118.4
8	1.23535	1.35846	6.87562	6.86580	6.72143	6.71674	34.040	152.2	77.4	114.8
9	1.23595	1.35934	6.87567	6.86669	6.72160	6.71671	34.117	139.2	80.7	110.0
10	1.23487	1.35787	6.87544	6.86571	6.72122	6.71652	34.010	150.8	77.5	114.2
11	1.23605	1.35933	6.87533	6.86568	6.72133	6.71661	34.087	149.6	77.9	113.8
12	1.23609	1.35788	6.87621	6.86543	6.72157	6.71624	33.675	167.1	87.9	127.5
								151.7	81.2	

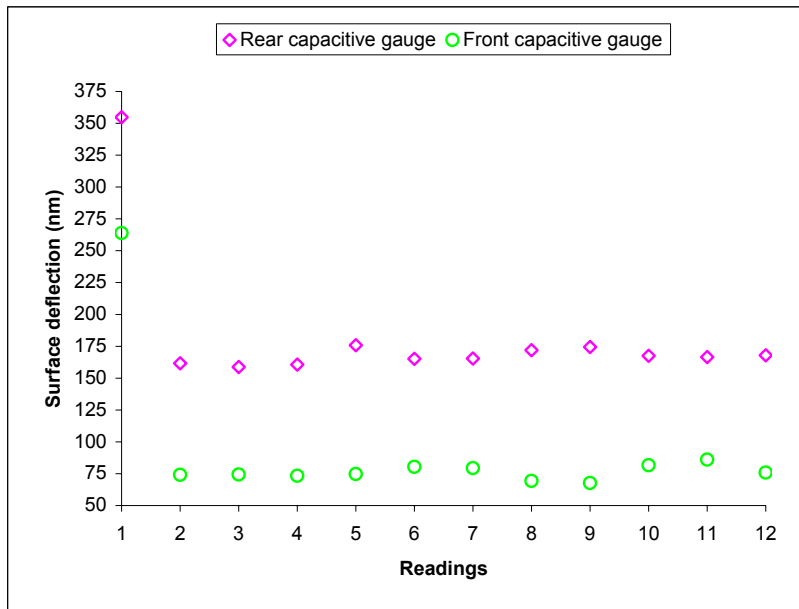
The first readings are not shown in this plot



RESULTS OF LAST SIX READINGS			
34.047	Ave. change of load	Ave. resultant deflec.	116.4
		and its standard devia.	6.1

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St2* SURFACE USING 75g DEAD-WEIGHT

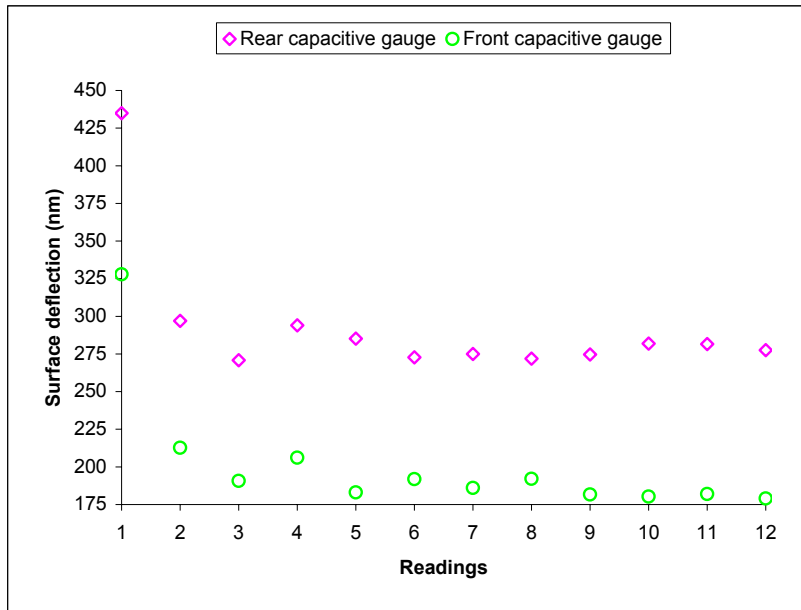
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.16790	1.42162	6.96717	6.94428	6.80116	6.78517	70.154	354.8	263.8	309.3
2	1.21464	1.42187	6.95361	6.94318	6.78946	6.78497	57.299	161.7	74.1	117.9
3	1.21581	1.42180	6.95324	6.94300	6.78947	6.78496	56.956	158.7	74.4	116.6
4	1.21707	1.42174	6.95320	6.94284	6.78977	6.78533	56.591	160.6	73.3	117.0
5	1.21946	1.42275	6.95314	6.94180	6.79014	6.78561	56.210	175.8	74.7	125.3
6	1.21892	1.42159	6.95308	6.94243	6.79024	6.78537	56.038	165.1	80.4	122.8
7	1.21987	1.42134	6.95299	6.94232	6.79007	6.78526	55.707	165.4	79.4	122.4
8	1.21861	1.42008	6.95284	6.94175	6.79008	6.78588	55.707	171.9	69.3	120.6
9	1.22001	1.42137	6.95276	6.94150	6.78996	6.78586	55.676	174.5	67.7	121.1
10	1.22066	1.42083	6.95265	6.94184	6.78991	6.78496	55.347	167.6	81.7	124.7
11	1.22123	1.42149	6.95217	6.94142	6.78973	6.78452	55.372	166.6	86.0	126.3
12	1.22105	1.42082	6.95217	6.94134	6.78951	6.78491	55.237	167.9	75.9	121.9
								169.0	76.7	



RESULTS OF LAST SIX READINGS			
55.508	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	122.8
		<i>and its standard devia.</i>	2.2

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St2* SURFACE USING 95g DEAD-WEIGHT

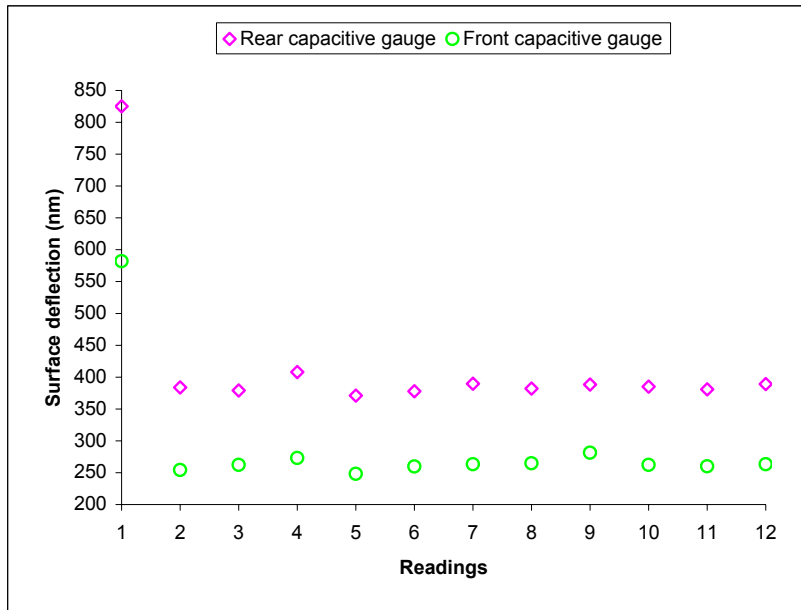
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.16900	1.49496	6.79688	6.76882	6.74565	6.72578	90.128	434.9	327.9	381.4
2	1.21705	1.49664	6.78697	6.76781	6.73749	6.72460	77.307	297.0	212.7	254.9
3	1.21960	1.49543	6.78483	6.76736	6.73560	6.72404	76.267	270.8	190.7	230.8
4	1.21885	1.49561	6.78595	6.76698	6.73637	6.72388	76.524	294.0	206.1	250.1
5	1.22025	1.49641	6.78421	6.76581	6.73518	6.72408	76.359	285.2	183.1	234.2
6	1.22120	1.49637	6.78385	6.76625	6.73528	6.72365	76.085	272.8	191.9	232.4
7	1.22138	1.49734	6.78342	6.76568	6.73473	6.72346	76.303	275.0	186.0	230.5
8	1.22222	1.49626	6.78308	6.76554	6.73455	6.72291	75.772	271.9	192.1	232.0
9	1.22248	1.49598	6.78286	6.76514	6.73443	6.72342	75.623	274.7	181.7	228.2
10	1.22165	1.49563	6.78297	6.76478	6.73408	6.72315	75.756	281.9	180.3	231.1
11	1.22187	1.49622	6.78255	6.76438	6.73409	6.72306	75.858	281.6	182.0	231.8
12	1.22177	1.49663	6.78242	6.76452	6.73395	6.72310	75.999	277.5	179.0	228.3
								277.1	183.5	



RESULTS OF LAST SIX READINGS			
75.885	Ave. change of load	Ave. resultant deflec.	230.3
		and its standard devia.	1.7

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St2* SURFACE USING 115g DEAD-WEIGHT

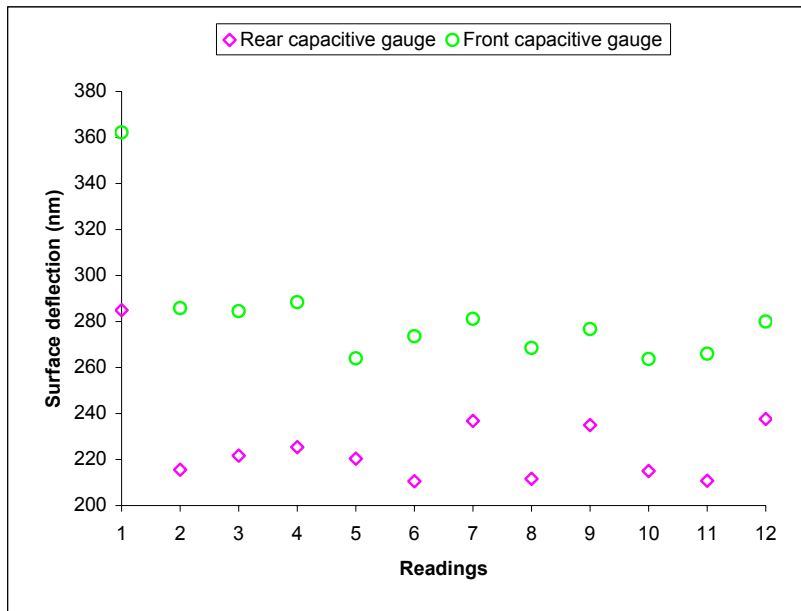
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.16669	1.57662	6.83071	6.77747	6.78321	6.74793	113.346	825.2	582.1	703.7
2	1.21150	1.57960	6.80075	6.77598	6.76268	6.74727	101.780	383.9	254.3	319.1
3	1.21130	1.57864	6.79980	6.77534	6.76260	6.74670	101.570	379.1	262.4	320.8
4	1.21276	1.57911	6.80041	6.77409	6.76272	6.74617	101.296	408.0	273.1	340.6
5	1.21418	1.57928	6.79765	6.77371	6.76185	6.74680	100.951	371.1	248.3	309.7
6	1.21516	1.57862	6.79726	6.77289	6.76111	6.74537	100.497	377.7	259.7	318.7
7	1.21512	1.57857	6.79774	6.77261	6.76105	6.74509	100.494	389.5	263.3	326.4
8	1.21459	1.57876	6.79707	6.77242	6.76084	6.74479	100.693	382.1	264.8	323.5
9	1.21422	1.57737	6.79746	6.77240	6.76175	6.74470	100.411	388.4	281.3	334.9
10	1.21440	1.57748	6.79686	6.77202	6.76016	6.74427	100.392	385.0	262.2	323.6
11	1.21471	1.57773	6.79688	6.77231	6.76040	6.74464	100.375	380.8	260.0	320.4
12	1.21543	1.57808	6.79686	6.77176	6.76023	6.74428	100.273	389.1	263.2	326.2
								385.8	265.8	



RESULTS OF LAST SIX READINGS			
100.440	Ave. change of load	Ave. resultant deflec.	325.8
		and its standard devia.	4.9

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St3* SURFACE USING 35g DEAD-WEIGHT

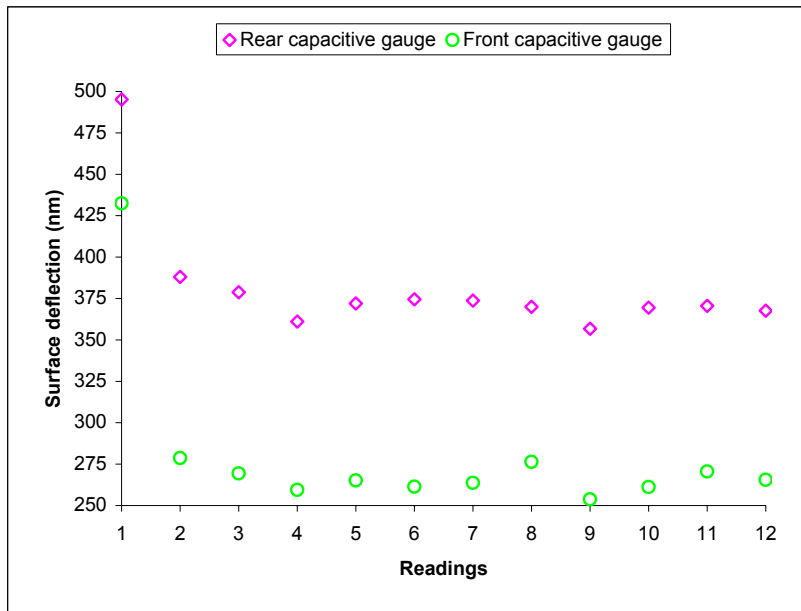
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.01215	1.13239	7.31998	7.30160	7.33017	7.30822	33.246	284.9	362.2	323.6
2	1.02652	1.13408	7.31355	7.29964	7.32362	7.30630	29.740	215.6	285.8	250.7
3	1.02621	1.13500	7.31329	7.29899	7.32330	7.30606	30.081	221.7	284.5	253.1
4	1.02897	1.13495	7.31321	7.29867	7.32372	7.30624	29.304	225.4	288.4	256.9
5	1.02926	1.13507	7.31232	7.29810	7.32300	7.30700	29.257	220.4	264.0	242.2
6	1.02949	1.13491	7.31177	7.29818	7.32272	7.30614	29.149	210.6	273.6	242.1
7	1.02901	1.13495	7.31303	7.29775	7.32285	7.30581	29.293	236.8	281.2	259.0
8	1.02938	1.13509	7.31126	7.29761	7.32192	7.30565	29.229	211.6	268.5	240.1
9	1.03037	1.13485	7.31256	7.29740	7.32240	7.30563	28.889	235.0	276.7	255.9
10	1.03119	1.13536	7.31086	7.29699	7.32143	7.30545	28.803	215.0	263.7	239.4
11	1.03061	1.13702	7.31079	7.29719	7.32138	7.30526	29.422	210.8	266.0	238.4
12	1.02987	1.13678	7.31223	7.29690	7.32230	7.30533	29.561	237.6	280.0	258.8
								224.5	272.7	



RESULTS OF LAST SIX READINGS			
29.200	Ave. change of load	Ave. resultant deflec.	248.6
		and its standard devia.	10.3

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St3* SURFACE USING 55g DEAD-WEIGHT

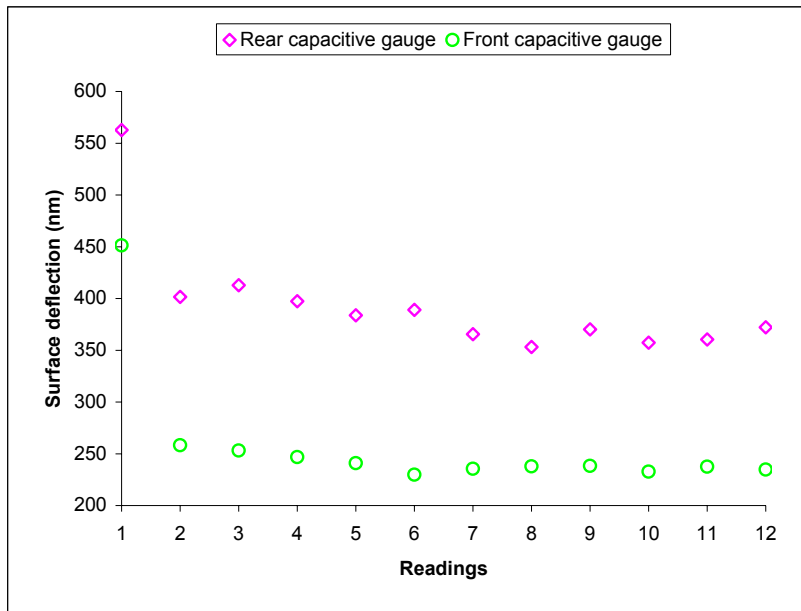
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.02577	1.22035	6.28200	6.25005	6.29106	6.26485	53.802	495.2	432.5	463.9
2	1.04187	1.22158	6.27408	6.24905	6.28137	6.26448	49.690	388.0	278.7	333.4
3	1.04315	1.22141	6.27268	6.24824	6.28030	6.26397	49.289	378.8	269.4	324.1
4	1.04289	1.21992	6.27206	6.24876	6.28000	6.26427	48.949	361.1	259.5	310.3
5	1.04407	1.22131	6.27172	6.24772	6.28041	6.26434	49.007	372.0	265.2	318.6
6	1.04306	1.22068	6.27124	6.24708	6.27991	6.26407	49.112	374.5	261.4	318.0
7	1.04341	1.22152	6.27096	6.24685	6.28000	6.26402	49.248	373.7	263.7	318.7
8	1.04426	1.22206	6.27053	6.24666	6.28015	6.26340	49.162	370.0	276.4	323.2
9	1.04456	1.22094	6.27044	6.24743	6.28021	6.26483	48.769	356.7	253.8	305.3
10	1.04462	1.22121	6.27030	6.24646	6.27997	6.26414	48.827	369.5	261.2	315.4
11	1.04523	1.22083	6.27007	6.24616	6.28027	6.26387	48.554	370.6	270.6	320.6
12	1.04449	1.22008	6.26982	6.24610	6.27977	6.26367	48.551	367.7	265.6	316.7
								368.0	265.2	



RESULTS OF LAST SIX READINGS			
48.852	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	316.6
		<i>and its standard devia.</i>	6.2

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St3* SURFACE USING 75g DEAD-WEIGHT

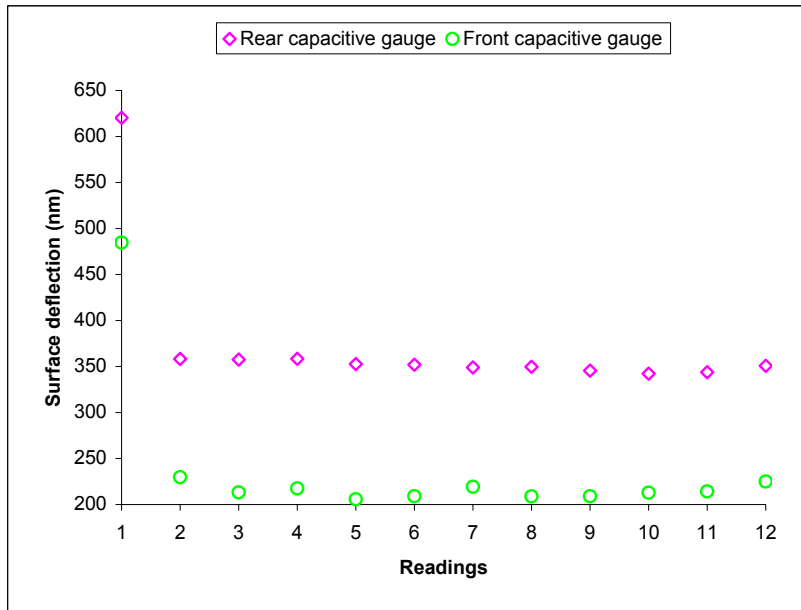
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.24459	1.52556	6.92609	6.88978	6.88300	6.85565	77.689	562.8	451.3	507.1
2	1.26666	1.52625	6.91301	6.88710	6.87034	6.85469	71.777	401.6	258.2	329.9
3	1.26790	1.52541	6.91262	6.88599	6.86948	6.85414	71.202	412.8	253.1	333.0
4	1.26545	1.52457	6.90852	6.88288	6.86680	6.85184	71.647	397.4	246.8	322.1
5	1.26771	1.52519	6.91096	6.88620	6.86862	6.85402	71.193	383.8	240.9	312.4
6	1.26854	1.52420	6.91055	6.88545	6.86715	6.85322	70.690	389.1	229.8	309.5
7	1.26983	1.52530	6.90837	6.88478	6.86702	6.85275	70.638	365.6	235.5	300.6
8	1.26958	1.52495	6.90875	6.88597	6.86755	6.85313	70.610	353.1	237.9	295.5
9	1.26959	1.52521	6.90975	6.88587	6.86689	6.85245	70.679	370.1	238.3	304.2
10	1.26858	1.52519	6.91020	6.88715	6.86807	6.85397	70.953	357.3	232.7	295.0
11	1.27083	1.52584	6.90739	6.88414	6.86651	6.85211	70.511	360.4	237.6	299.0
12	1.26946	1.52506	6.90917	6.88516	6.86738	6.85315	70.674	372.2	234.8	303.5
								363.1	236.1	



RESULTS OF LAST SIX READINGS			
70.678	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	299.6
		<i>and its standard devia.</i>	3.9

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St3* SURFACE USING 95g DEAD-WEIGHT

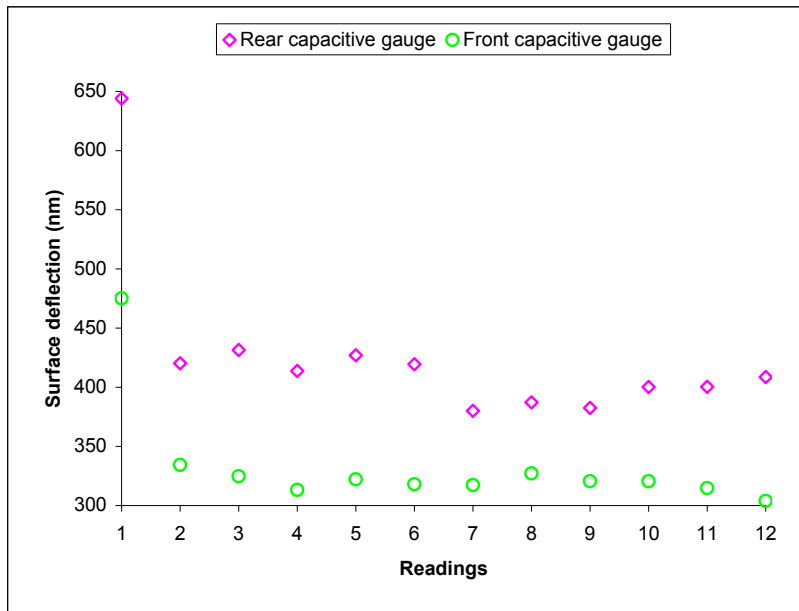
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.23490	1.58476	7.39621	7.35619	7.23602	7.20665	96.737	620.3	484.6	552.5
2	1.26759	1.58475	7.37823	7.35512	7.21993	7.20601	87.695	358.2	229.7	294.0
3	1.26963	1.58578	7.37675	7.35368	7.21832	7.20539	87.416	357.6	213.3	285.5
4	1.26603	1.58513	7.37296	7.34984	7.21696	7.20378	88.231	358.4	217.5	288.0
5	1.27063	1.58595	7.37582	7.35307	7.21798	7.20551	87.186	352.6	205.8	279.2
6	1.27085	1.58554	7.37546	7.35275	7.21770	7.20503	87.012	352.0	209.1	280.6
7	1.27302	1.58755	7.37259	7.35007	7.21680	7.20351	86.968	349.1	219.3	284.2
8	1.26986	1.58509	7.37465	7.35209	7.21748	7.20482	87.161	349.7	208.9	279.3
9	1.27074	1.58623	7.37481	7.35252	7.21717	7.20450	87.233	345.5	209.1	277.3
10	1.27144	1.58525	7.37421	7.35213	7.21724	7.20434	86.769	342.2	212.9	277.6
11	1.27314	1.58680	7.37481	7.35263	7.21679	7.20380	86.727	343.8	214.3	279.1
12	1.27016	1.58700	7.37196	7.34933	7.21634	7.20270	87.607	350.8	225.1	288.0
								346.9	214.9	



RESULTS OF LAST SIX READINGS			
87.078	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	280.9
		<i>and its standard devia.</i>	4.3

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON *St3* SURFACE USING 115g DEAD-WEIGHT

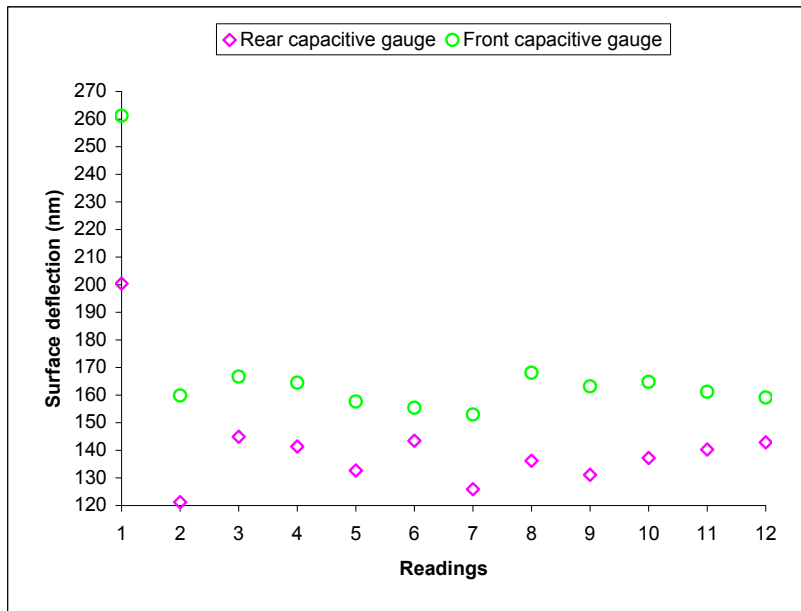
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.23693	1.66712	6.88485	6.84330	6.76941	6.74061	118.948	644.0	475.2	559.6
2	1.26498	1.66944	6.86864	6.84153	6.75939	6.73913	111.834	420.2	334.3	377.3
3	1.26377	1.66911	6.86897	6.84113	6.75855	6.73887	112.077	431.5	324.7	378.1
4	1.26723	1.67213	6.86710	6.84041	6.75753	6.73854	111.955	413.7	313.3	363.5
5	1.26781	1.67119	6.86820	6.84065	6.75822	6.73869	111.535	427.0	322.2	374.6
6	1.26454	1.67151	6.86685	6.83979	6.75786	6.73859	112.528	419.4	318.0	368.7
7	1.26639	1.67110	6.86535	6.84083	6.75777	6.73854	111.903	380.1	317.3	348.7
8	1.26533	1.67098	6.86595	6.84097	6.75845	6.73862	112.163	387.2	327.2	357.2
9	1.26794	1.67209	6.86395	6.83927	6.75654	6.73711	111.748	382.5	320.6	351.6
10	1.26811	1.67135	6.86645	6.84063	6.75809	6.73866	111.496	400.2	320.6	360.4
11	1.26563	1.67182	6.86246	6.83663	6.75591	6.73684	112.312	400.4	314.7	357.6
12	1.26576	1.67139	6.86293	6.83657	6.75566	6.73724	112.157	408.6	303.9	356.3
								393.2	317.4	



RESULTS OF LAST SIX READINGS			
111.963	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	355.3
		<i>and its standard devia.</i>	4.3

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON *Co1* SURFACE USING 35g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.02446	1.13915	6.65048	6.63755	6.66936	6.65353	31.712	200.4	261.2	230.8
2	1.05629	1.13976	6.64516	6.63734	6.66276	6.65307	23.080	121.2	159.9	140.6
3	1.05652	1.13989	6.64463	6.63528	6.66187	6.65177	23.052	144.9	166.7	155.8
4	1.05728	1.13959	6.64416	6.63504	6.66148	6.65151	22.759	141.4	164.5	153.0
5	1.06086	1.14148	6.64145	6.63289	6.66037	6.65081	22.292	132.7	157.7	145.2
6	1.06006	1.14150	6.64198	6.63272	6.66015	6.65073	22.518	143.5	155.4	149.5
7	1.05715	1.13957	6.64343	6.63531	6.66101	6.65174	22.789	125.9	153.0	139.5
8	1.06025	1.13985	6.64308	6.63429	6.66146	6.65127	22.009	136.2	168.1	152.2
9	1.05826	1.13964	6.64248	6.63402	6.66115	6.65126	22.502	131.1	163.2	147.2
10	1.05866	1.13969	6.64251	6.63366	6.66105	6.65106	22.405	137.2	164.8	151.0
11	1.05878	1.13934	6.64267	6.63362	6.66086	6.65109	22.275	140.3	161.2	150.8
12	1.05776	1.13956	6.64246	6.63324	6.66059	6.65095	22.618	142.9	159.1	151.0
								135.6	161.6	

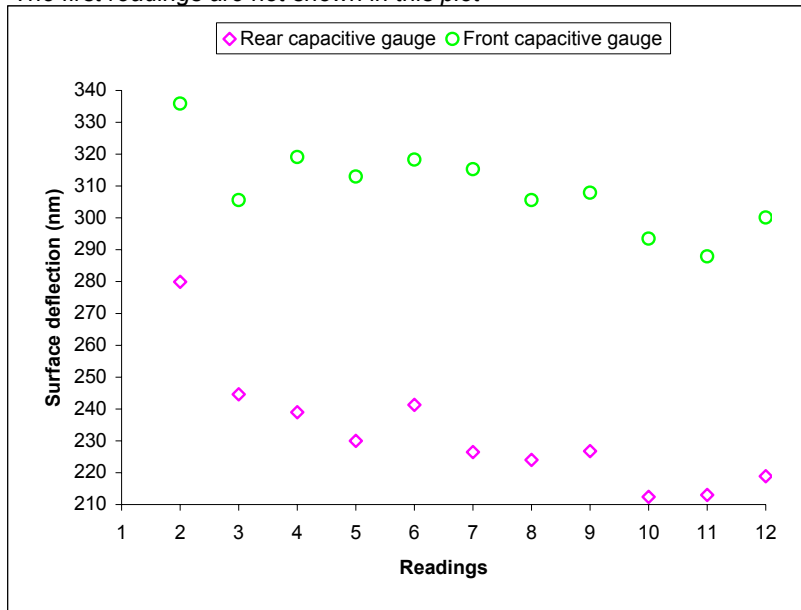


RESULTS OF LAST SIX READINGS			
22.433	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	148.6
		<i>and its standard devia.</i>	4.8

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON Co1 SURFACE USING 55g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.03457	1.22800	7.61896	7.56132	7.63647	7.57484	53.484	893.4	1016.9	955.2
2	1.06875	1.22930	7.57631	7.55825	7.59154	7.57118	44.392	279.9	335.9	307.9
3	1.07230	1.22751	7.57378	7.55800	7.58896	7.57044	42.916	244.6	305.6	275.1
4	1.07420	1.22719	7.57248	7.55706	7.58823	7.56889	42.302	239.0	319.1	279.1
5	1.07416	1.22565	7.57167	7.55683	7.58797	7.56900	41.887	230.0	313.0	271.5
6	1.07116	1.22553	7.57190	7.55633	7.58791	7.56862	42.683	241.3	318.3	279.8
7	1.07557	1.22617	7.57000	7.55539	7.58753	7.56842	41.641	226.5	315.3	270.9
8	1.07443	1.22514	7.56978	7.55533	7.58688	7.56836	41.671	224.0	305.6	264.8
9	1.07441	1.22618	7.56956	7.55493	7.58707	7.56841	41.965	226.8	307.9	267.4
10	1.07650	1.22581	7.56906	7.55536	7.58658	7.56879	41.284	212.4	293.5	253.0
11	1.07874	1.22432	7.56862	7.55488	7.58623	7.56878	40.253	213.0	287.9	250.5
12	1.07746	1.22464	7.56831	7.55419	7.58641	7.56822	40.695	218.9	300.1	259.5
								220.3	301.7	

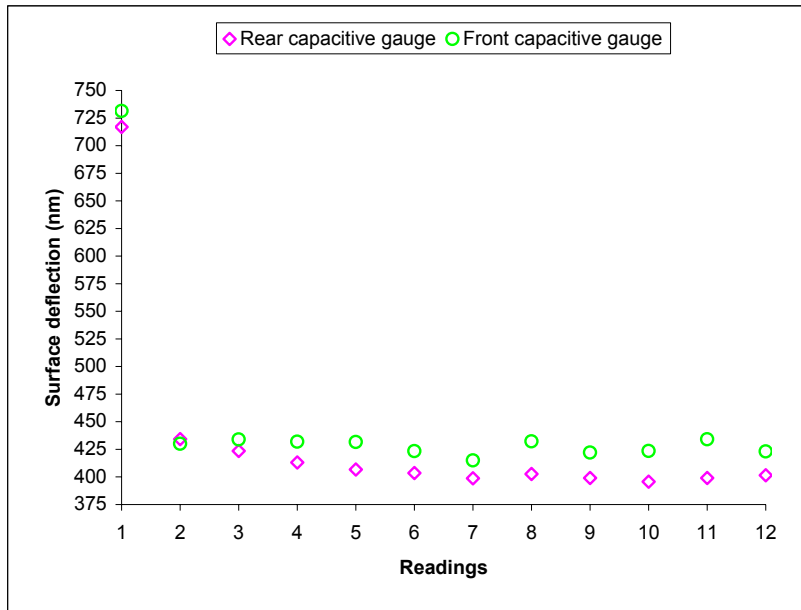
The first readings are not shown in this plot



RESULTS OF LAST SIX READINGS			
41.252	Ave. change of load	Ave. resultant deflec.	261.0
		and its standard devia.	8.1

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON Co1 SURFACE USING 75g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.02423	1.29526	6.89074	6.84449	6.91439	6.87006	74.940	716.9	731.4	724.2
2	1.05300	1.29544	6.87130	6.84328	6.89440	6.86834	67.035	434.3	430.0	432.2
3	1.05348	1.29614	6.86968	6.84235	6.89401	6.86771	67.096	423.6	434.0	428.8
4	1.05292	1.29551	6.86877	6.84212	6.89379	6.86761	67.076	413.1	432.0	422.6
5	1.05523	1.29692	6.86787	6.84163	6.89310	6.86694	66.828	406.7	431.6	419.2
6	1.05574	1.29775	6.86781	6.84177	6.89262	6.86696	66.916	403.6	423.4	413.5
7	1.05652	1.29654	6.86718	6.84146	6.89177	6.86662	66.366	398.7	415.0	406.9
8	1.05450	1.29715	6.86715	6.84117	6.89245	6.86625	67.093	402.7	432.3	417.5
9	1.05582	1.29679	6.86707	6.84133	6.89216	6.86658	66.628	399.0	422.1	410.6
10	1.05569	1.29736	6.86669	6.84116	6.89210	6.86643	66.822	395.7	423.6	409.7
11	1.05584	1.29688	6.86665	6.84090	6.89241	6.86610	66.648	399.1	434.1	416.6
12	1.05459	1.29826	6.86655	6.84065	6.89186	6.86622	67.375	401.5	423.1	412.3
								399.5	425.0	

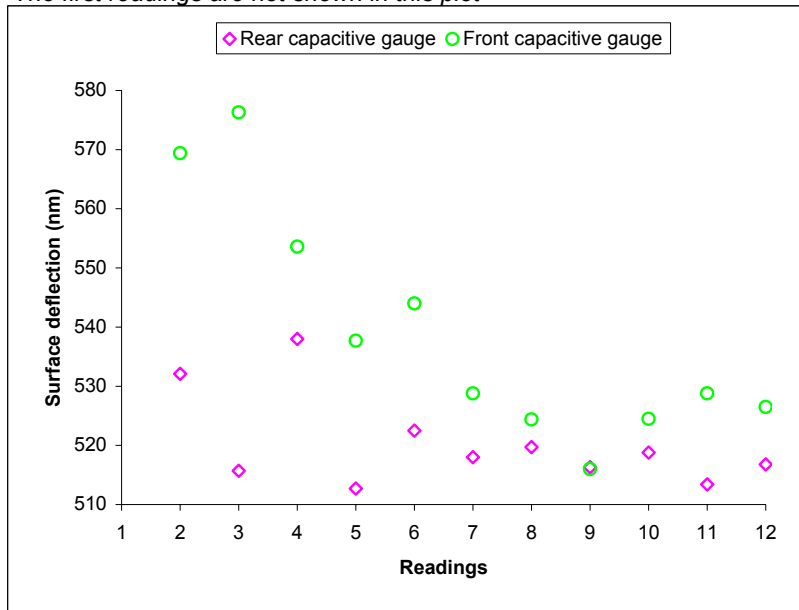


RESULTS OF LAST SIX READINGS			
66.822	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	412.2
		<i>and its standard devia.</i>	4.1

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON Co1 SURFACE USING 95g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	0.99483	1.33832	6.41357	6.25056	6.41994	6.25925	94.975	2526.7	2651.4	2589.1
2	1.03114	1.34188	6.27921	6.24488	6.28807	6.25356	85.920	532.1	569.4	550.8
3	1.03323	1.34005	6.27686	6.24359	6.28645	6.25152	84.836	515.7	576.3	546.0
4	1.03251	1.34082	6.27655	6.24184	6.28471	6.25116	85.248	538.0	553.6	545.8
5	1.03439	1.33948	6.27563	6.24255	6.28351	6.25092	84.358	512.7	537.7	525.2
6	1.03416	1.33964	6.27532	6.24161	6.28288	6.24991	84.466	522.5	544.0	533.3
7	1.03405	1.33941	6.27453	6.24111	6.28169	6.24964	84.432	518.0	528.8	523.4
8	1.03574	1.34037	6.27425	6.24072	6.28093	6.24915	84.231	519.7	524.4	522.1
9	1.03524	1.34070	6.27419	6.24088	6.28049	6.24922	84.460	516.3	516.0	516.2
10	1.03737	1.34058	6.27401	6.24054	6.28037	6.24858	83.838	518.8	524.5	521.7
11	1.03422	1.34015	6.27415	6.24103	6.28019	6.24814	84.590	513.4	528.8	521.1
12	1.03635	1.34121	6.27374	6.24040	6.27984	6.24793	84.294	516.8	526.5	521.7
								517.2	524.8	

The first readings are not shown in this plot

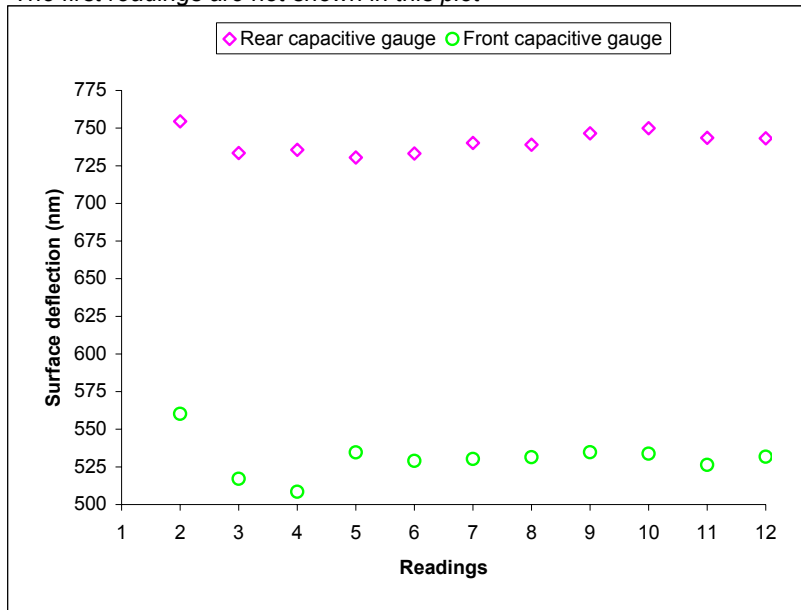


RESULTS OF LAST SIX READINGS			
84.308	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	521.0
		<i>and its standard devia.</i>	2.5

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON Co1 SURFACE USING 115g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	0.99608	1.41441	6.18883	6.03589	6.19509	6.05812	115.669	2370.6	2260.0	2315.3
2	1.03082	1.41715	6.07953	6.03085	6.08851	6.05456	106.821	754.5	560.2	657.4
3	1.03141	1.41779	6.07701	6.02969	6.08507	6.05373	106.834	733.5	517.1	625.3
4	1.03010	1.41753	6.07646	6.02900	6.08439	6.05357	107.125	735.6	508.5	622.1
5	1.03277	1.41788	6.07531	6.02818	6.08391	6.05151	106.483	730.5	534.6	632.6
6	1.03415	1.41860	6.07461	6.02731	6.08366	6.05160	106.301	733.1	529.0	631.1
7	1.03344	1.41952	6.07447	6.02672	6.08363	6.05149	106.752	740.1	530.3	635.2
8	1.03266	1.41834	6.07397	6.02629	6.08277	6.05056	106.641	739.0	531.5	635.3
9	1.03412	1.41799	6.07401	6.02585	6.08217	6.04976	106.140	746.5	534.8	640.7
10	1.03365	1.41908	6.07391	6.02553	6.08201	6.04966	106.572	749.9	533.8	641.9
11	1.03502	1.41954	6.07325	6.02528	6.08109	6.04919	106.320	743.5	526.3	634.9
12	1.03411	1.41909	6.07319	6.02524	6.08088	6.04865	106.447	743.2	531.8	637.5
								743.7	531.4	

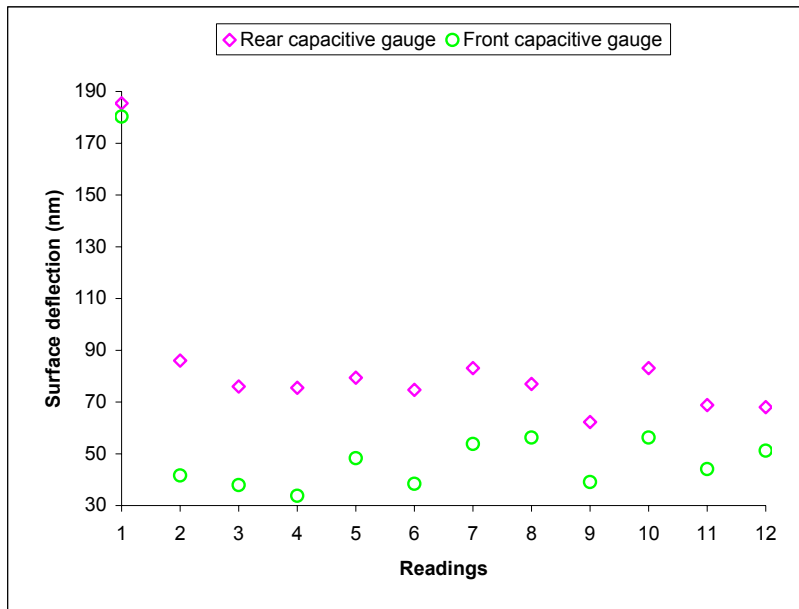
The first readings are not shown in this plot



RESULTS OF LAST SIX READINGS			
106.479	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	637.6
		<i>and its standard devia.</i>	3.0

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₂ SURFACE USING 35g DEAD-WEIGHT

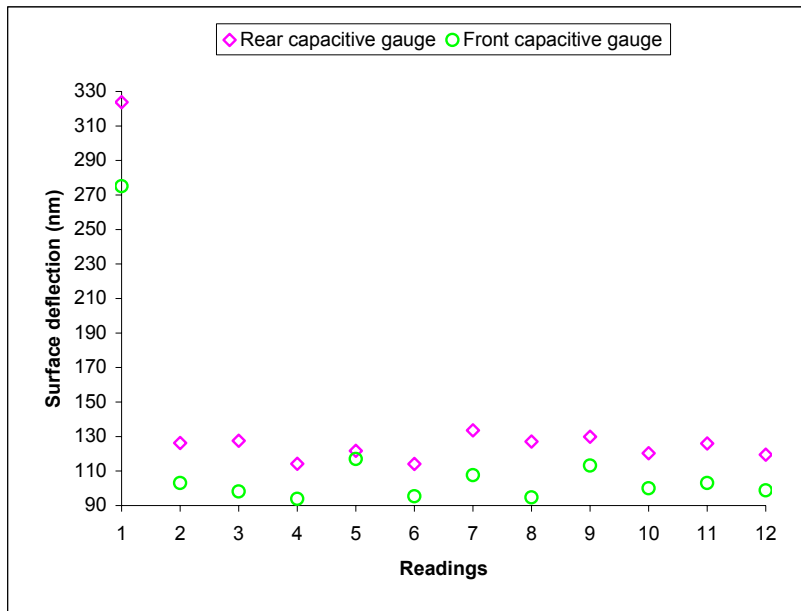
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.14369	1.25301	7.23338	7.22142	7.25605	7.24512	30.227	185.4	180.3	182.9
2	1.17727	1.25270	7.22586	7.22031	7.24740	7.24488	20.856	86.0	41.6	63.8
3	1.17696	1.25359	7.22502	7.22012	7.24732	7.24502	21.188	76.0	37.9	57.0
4	1.17837	1.25261	7.22425	7.21938	7.24708	7.24503	20.527	75.5	33.8	54.7
5	1.17832	1.25455	7.22389	7.21877	7.24762	7.24469	21.078	79.4	48.3	63.9
6	1.17823	1.25251	7.22327	7.21845	7.24685	7.24452	20.538	74.7	38.4	56.6
7	1.17729	1.25326	7.22336	7.21800	7.24755	7.24429	21.006	83.1	53.8	68.5
8	1.17830	1.25283	7.22303	7.21806	7.24734	7.24393	20.608	77.0	56.3	66.7
9	1.17909	1.25371	7.22265	7.21863	7.24657	7.24420	20.633	62.3	39.1	50.7
10	1.17824	1.25287	7.22297	7.21761	7.24704	7.24363	20.635	83.1	56.3	69.7
11	1.17966	1.25270	7.22189	7.21745	7.24604	7.24337	20.196	68.8	44.1	56.5
12	1.17867	1.25240	7.22168	7.21729	7.24612	7.24302	20.386	68.0	51.2	59.6
								73.7	50.1	



RESULTS OF LAST SIX READINGS			
20.577	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	61.9
		<i>and its standard devia.</i>	7.6

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON CO₂ SURFACE USING 55g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.14719	1.33669	6.87477	6.85388	6.89193	6.87526	52.397	323.8	275.1	299.5
2	1.19177	1.33506	6.86118	6.85303	6.88117	6.87492	39.620	126.3	103.1	114.7
3	1.19364	1.33326	6.86102	6.85279	6.88106	6.87511	38.605	127.6	98.2	112.9
4	1.19558	1.33205	6.86052	6.85315	6.88136	6.87567	37.734	114.2	93.9	104.1
5	1.19596	1.33149	6.86030	6.85245	6.88295	6.87586	37.474	121.7	117.0	119.4
6	1.19713	1.33204	6.86037	6.85301	6.88226	6.87648	37.303	114.1	95.4	104.8
7	1.19880	1.33246	6.86095	6.85233	6.88269	6.87617	36.957	133.6	107.6	120.6
8	1.19815	1.33236	6.85994	6.85174	6.88207	6.87633	37.109	127.1	94.7	110.9
9	1.19704	1.33104	6.86043	6.85205	6.88246	6.87560	37.051	129.9	113.2	121.6
10	1.19643	1.33071	6.85940	6.85164	6.88149	6.87543	37.129	120.3	100.0	110.2
11	1.19940	1.33199	6.85954	6.85141	6.88165	6.87540	36.661	126.0	103.1	114.6
12	1.19812	1.33116	6.85922	6.85151	6.88119	6.87520	36.786	119.5	98.8	109.2
								126.1	102.9	

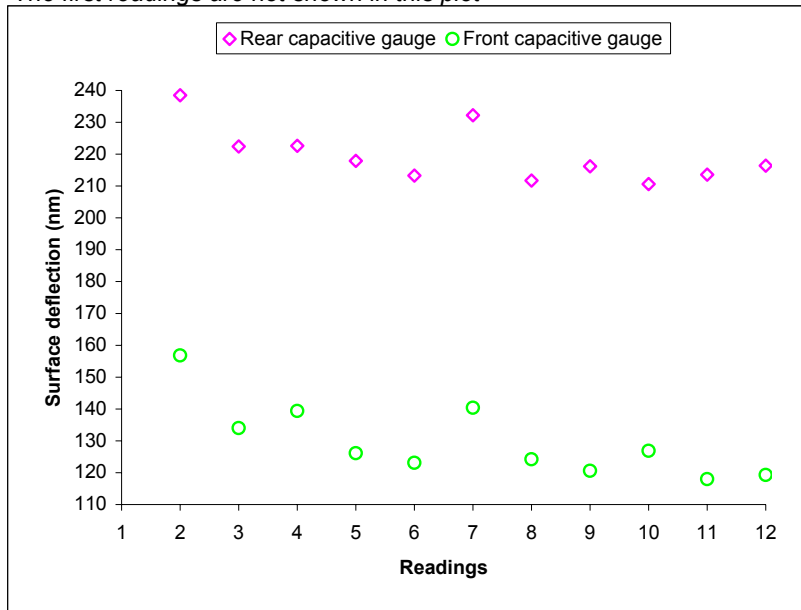


RESULTS OF LAST SIX READINGS			
36.949	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	114.5
		<i>and its standard devia.</i>	5.4

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON CO₂ SURFACE USING 75g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.13802	1.40426	7.39689	7.35336	7.18598	7.14827	73.616	674.7	622.2	648.5
2	1.18494	1.40218	7.36683	7.35144	7.15681	7.14731	60.067	238.5	156.8	197.7
3	1.18760	1.40024	7.36558	7.35123	7.15599	7.14787	58.795	222.4	134.0	178.2
4	1.18823	1.40051	7.36497	7.35061	7.15574	7.14729	58.696	222.6	139.4	181.0
5	1.18944	1.39892	7.36470	7.35064	7.15545	7.14781	57.921	217.9	126.1	172.0
6	1.18914	1.39874	7.36404	7.35028	7.15511	7.14765	57.955	213.3	123.1	168.2
7	1.17363	1.39629	7.36563	7.35065	7.15650	7.14799	61.566	232.2	140.4	186.3
8	1.19063	1.39755	7.36420	7.35054	7.15558	7.14805	57.214	211.7	124.2	168.0
9	1.19029	1.39705	7.36395	7.35000	7.15528	7.14797	57.169	216.2	120.6	168.4
10	1.19070	1.39714	7.36380	7.35021	7.15523	7.14754	57.081	210.6	126.9	168.8
11	1.19214	1.39778	7.36358	7.34980	7.15497	7.14782	56.860	213.6	118.0	165.8
12	1.18804	1.39615	7.36315	7.34919	7.15379	7.14656	57.543	216.4	119.3	167.9
								216.8	124.9	

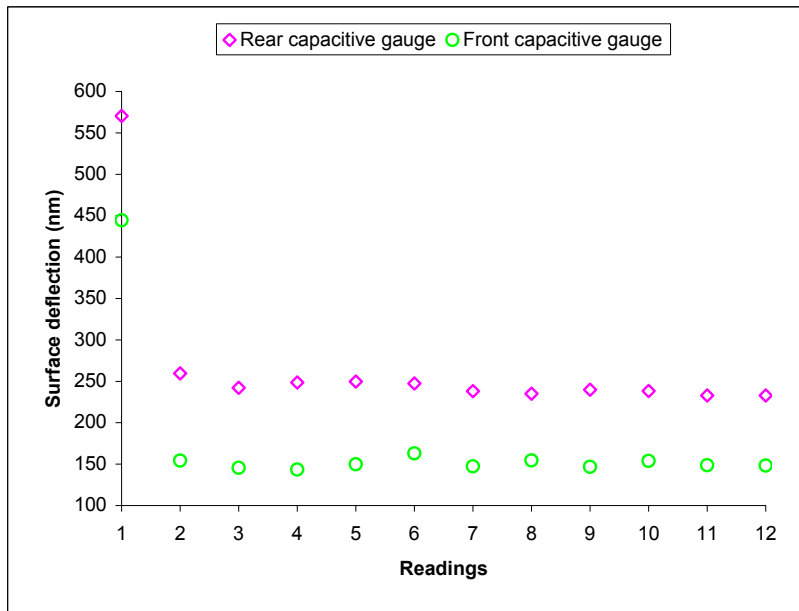
The first readings are not shown in this plot



RESULTS OF LAST SIX READINGS			
57.906	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	170.8
		<i>and its standard devia.</i>	7.6

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON CO₂ SURFACE USING 95g DEAD-WEIGHT

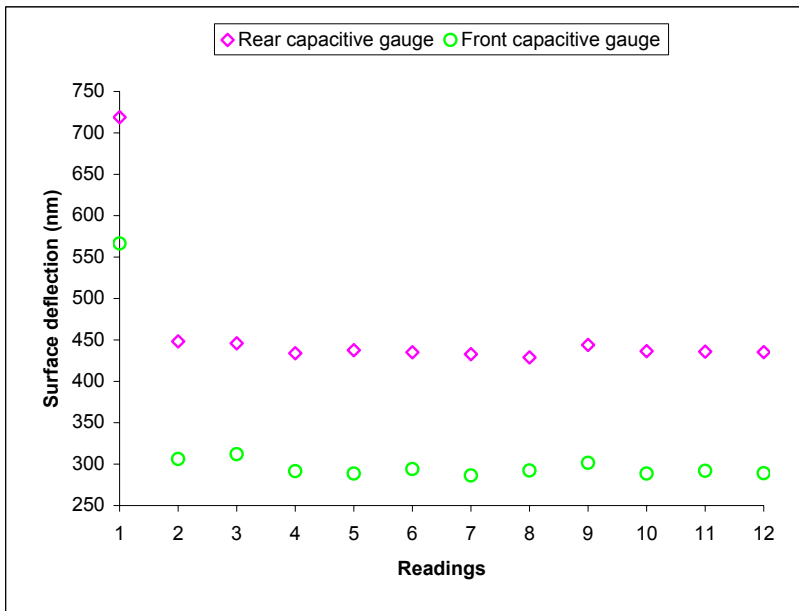
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.12149	1.46914	6.30548	6.26868	6.15937	6.13243	96.126	570.4	444.5	507.5
2	1.17708	1.46677	6.28372	6.26698	6.13988	6.13053	80.100	259.5	154.3	206.9
3	1.17943	1.46570	6.28299	6.26737	6.13900	6.13018	79.154	242.1	145.5	193.8
4	1.18022	1.46413	6.28198	6.26594	6.13813	6.12944	78.501	248.6	143.4	196.0
5	1.17955	1.46281	6.28196	6.26585	6.13750	6.12842	78.322	249.7	149.8	199.8
6	1.17964	1.46315	6.28141	6.26545	6.13771	6.12783	78.391	247.4	163.0	205.2
7	1.18122	1.46258	6.28072	6.26535	6.13699	6.12806	77.796	238.2	147.3	192.8
8	1.18084	1.46217	6.28073	6.26557	6.13739	6.12803	77.788	235.0	154.4	194.7
9	1.17976	1.46199	6.28069	6.26521	6.13718	6.12829	78.037	239.9	146.7	193.3
10	1.18040	1.46239	6.28031	6.26493	6.13742	6.12809	77.971	238.4	153.9	196.2
11	1.18226	1.46312	6.28042	6.26539	6.13751	6.12850	77.658	233.0	148.7	190.9
12	1.18316	1.46300	6.27981	6.26478	6.13730	6.12831	77.376	233.0	148.3	190.7
								236.3	149.9	



RESULTS OF LAST SIX READINGS			
77.771	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	193.1
		<i>and its standard devia.</i>	2.1

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON CO₂ SURFACE USING 115g DEAD-WEIGHT

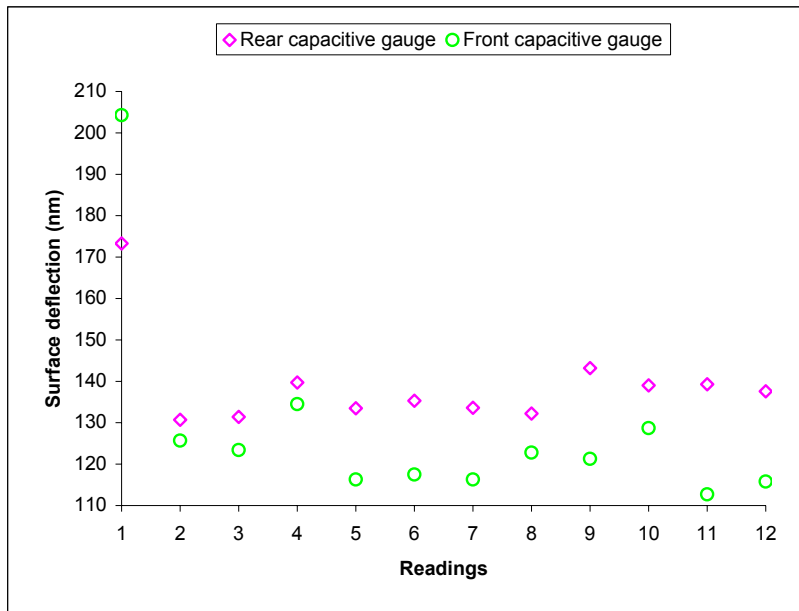
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.14327	1.56948	7.13603	7.08965	6.99198	6.95765	117.848	718.9	566.4	642.7
2	1.19053	1.56813	7.11692	7.08800	6.97484	6.95628	104.407	448.3	306.2	377.3
3	1.19201	1.56652	7.11634	7.08757	6.97472	6.95581	103.552	445.9	312.0	379.0
4	1.19331	1.56550	7.11534	7.08734	6.97379	6.95612	102.911	434.0	291.6	362.8
5	1.19334	1.56535	7.11504	7.08681	6.97354	6.95605	102.861	437.6	288.6	363.1
6	1.19466	1.56419	7.11479	7.08672	6.97329	6.95547	102.175	435.1	294.0	364.6
7	1.19372	1.56445	7.11468	7.08676	6.97321	6.95586	102.507	432.8	286.3	359.6
8	1.19421	1.56469	7.11464	7.08697	6.97342	6.95570	102.438	428.9	292.4	360.7
9	1.19365	1.56434	7.11519	7.08655	6.97398	6.95571	102.496	443.9	301.5	372.7
10	1.19433	1.56494	7.11421	7.08605	6.97288	6.95539	102.474	436.5	288.6	362.6
11	1.19510	1.56532	7.11423	7.08611	6.97293	6.95523	102.366	435.9	292.0	364.0
12	1.19429	1.56548	7.11420	7.08612	6.97296	6.95544	102.634	435.2	289.1	362.2
								435.5	291.7	



RESULTS OF LAST SIX READINGS			
102.486	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	363.6
		<i>and its standard devia.</i>	4.7

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₃ SURFACE USING 35g DEAD-WEIGHT

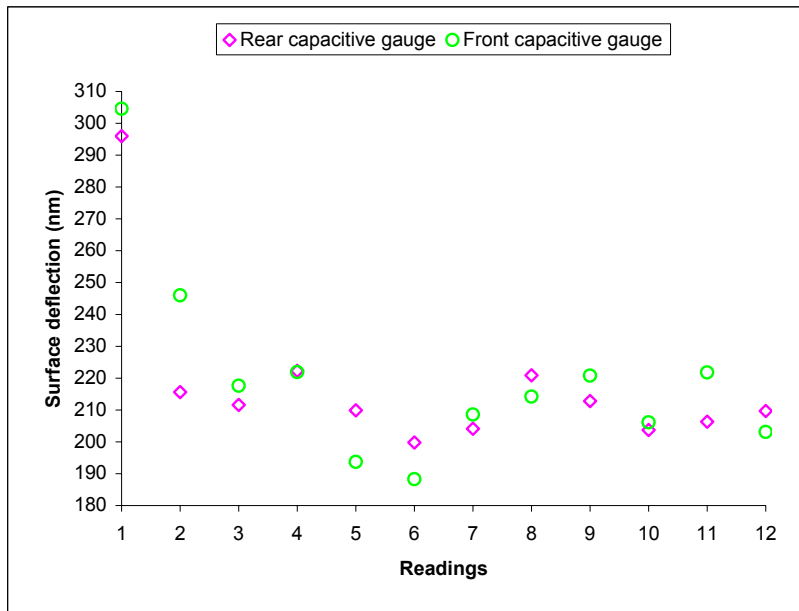
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.03463	1.15715	6.57171	6.56053	6.58156	6.56918	33.877	173.3	204.3	188.8
2	1.05085	1.15806	6.56703	6.55860	6.57665	6.56903	29.644	130.7	125.7	128.2
3	1.05076	1.15820	6.56652	6.55804	6.57651	6.56903	29.707	131.4	123.4	127.4
4	1.05105	1.15969	6.56610	6.55709	6.57659	6.56844	30.039	139.7	134.5	137.1
5	1.05220	1.15875	6.56549	6.55688	6.57544	6.56839	29.461	133.5	116.3	124.9
6	1.05162	1.16050	6.56571	6.55698	6.57562	6.56850	30.105	135.3	117.5	126.4
7	1.05175	1.15884	6.56502	6.55640	6.57548	6.56843	29.610	133.6	116.3	125.0
8	1.05225	1.15988	6.56505	6.55652	6.57577	6.56833	29.760	132.2	122.8	127.5
9	1.05005	1.16038	6.56215	6.55291	6.57533	6.56798	30.506	143.2	121.3	132.3
10	1.05161	1.15876	6.56216	6.55319	6.57560	6.56780	29.627	139.0	128.7	133.9
11	1.05127	1.15804	6.56185	6.55286	6.57476	6.56793	29.522	139.3	112.7	126.0
12	1.05140	1.15923	6.56184	6.55296	6.57512	6.56810	29.815	137.6	115.8	126.7
								137.5	119.6	



RESULTS OF LAST SIX READINGS			
29.807	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	128.5
		<i>and its standard devia.</i>	3.6

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₃ SURFACE USING 55g DEAD-WEIGHT

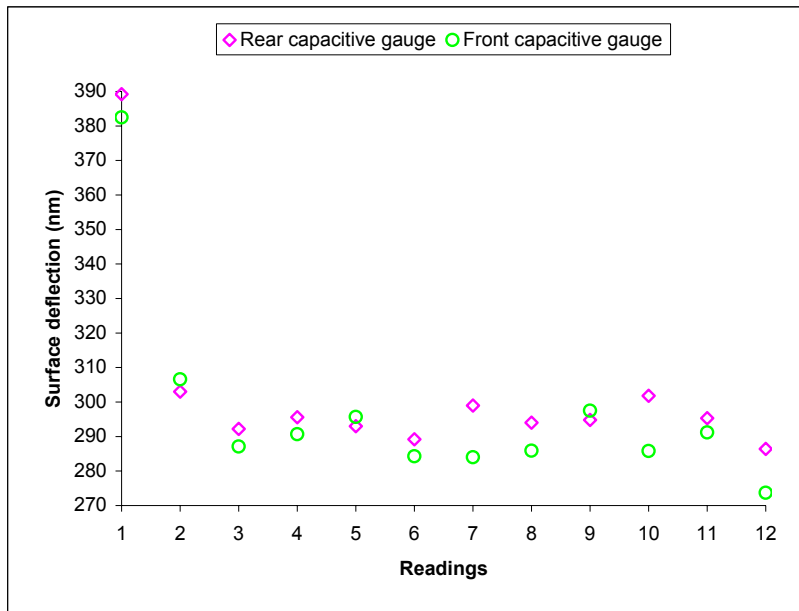
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.04621	1.24387	6.43370	6.41460	6.44229	6.42383	54.653	296.0	304.6	300.3
2	1.06829	1.24349	6.42643	6.41252	6.43585	6.42094	48.443	215.6	246.0	230.8
3	1.06847	1.24494	6.42587	6.41222	6.43497	6.42178	48.794	211.6	217.6	214.6
4	1.06777	1.24617	6.42548	6.41114	6.43433	6.42088	49.328	222.3	221.9	222.1
5	1.07254	1.24611	6.42341	6.40987	6.43259	6.42085	47.992	209.9	193.7	201.8
6	1.07216	1.24665	6.42282	6.40993	6.43276	6.42135	48.247	199.8	188.3	194.1
7	1.07289	1.24748	6.42425	6.41108	6.43410	6.42146	48.274	204.1	208.6	206.4
8	1.07278	1.24756	6.42424	6.40999	6.43400	6.42102	48.327	220.9	214.2	217.6
9	1.07273	1.24833	6.42441	6.41068	6.43464	6.42126	48.554	212.8	220.8	216.8
10	1.07186	1.24740	6.42357	6.41043	6.43358	6.42109	48.537	203.7	206.1	204.9
11	1.07255	1.24804	6.42359	6.41028	6.43451	6.42107	48.523	206.3	221.8	214.1
12	1.07121	1.24581	6.42305	6.40952	6.43257	6.42026	48.277	209.7	203.1	206.4
								209.6	212.4	



RESULTS OF LAST SIX READINGS			
48.415	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	211.0
		<i>and its standard devia.</i>	5.8

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON CO₃ SURFACE USING 75g DEAD-WEIGHT

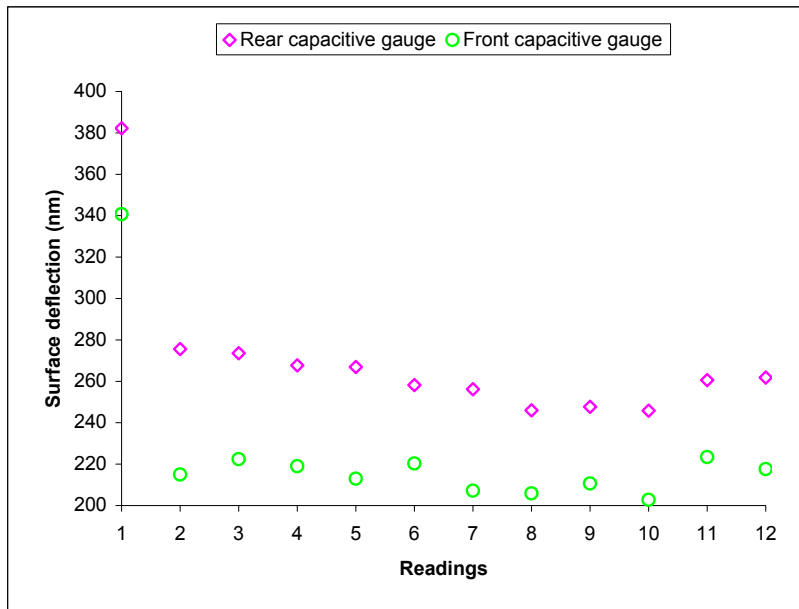
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.05775	1.33042	7.38079	7.35568	7.39610	7.37292	75.394	389.2	382.5	385.9
2	1.07965	1.33260	7.37313	7.35358	7.38994	7.37136	69.941	303.0	306.6	304.8
3	1.07828	1.33258	7.37238	7.35353	7.38952	7.37212	70.314	292.2	287.1	289.7
4	1.07998	1.33361	7.37221	7.35314	7.38996	7.37234	70.129	295.6	290.7	293.2
5	1.08065	1.33383	7.37155	7.35265	7.38992	7.37200	70.005	293.0	295.7	294.4
6	1.08011	1.33351	7.37122	7.35256	7.38987	7.37264	70.065	289.2	284.3	286.8
7	1.08166	1.33450	7.37059	7.35130	7.38978	7.37257	69.911	299.0	284.0	291.5
8	1.08267	1.33507	7.36999	7.35102	7.38939	7.37206	69.789	294.0	285.9	290.0
9	1.08150	1.33443	7.37016	7.35114	7.39065	7.37262	69.935	294.8	297.5	296.2
10	1.08158	1.33429	7.37033	7.35086	7.38955	7.37223	69.875	301.8	285.8	293.8
11	1.08089	1.33437	7.36943	7.35038	7.38877	7.37112	70.087	295.3	291.2	293.3
12	1.08191	1.33482	7.36891	7.35043	7.38848	7.37189	69.930	286.4	273.7	280.1
								295.2	286.4	



RESULTS OF LAST SIX READINGS			
69.921	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	290.8
		<i>and its standard devia.</i>	5.7

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON CO₃ SURFACE USING 95g DEAD-WEIGHT

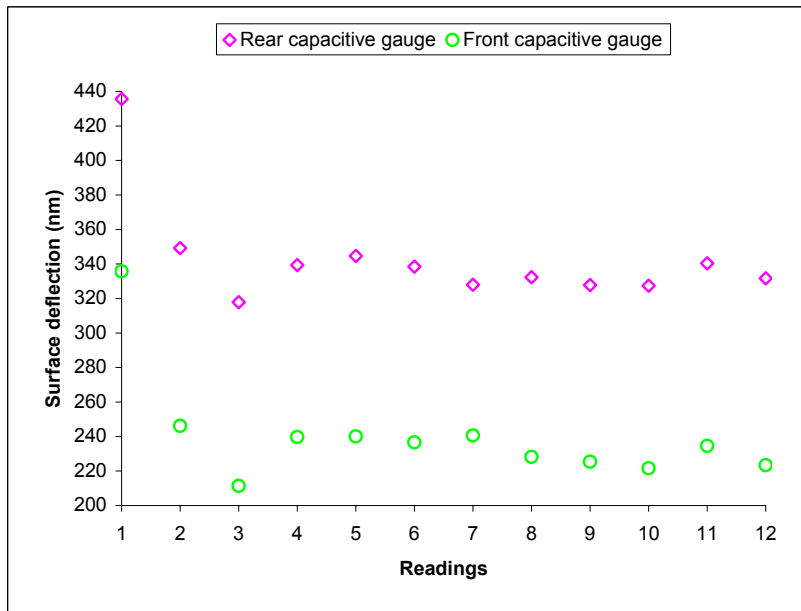
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.03652	1.38587	6.52725	6.50259	6.54344	6.52279	96.596	382.2	340.7	361.5
2	1.05824	1.38745	6.51799	6.50021	6.53415	6.52112	91.027	275.6	215.0	245.3
3	1.05892	1.38816	6.51619	6.49854	6.53323	6.51975	91.035	273.6	222.4	248.0
4	1.05876	1.38568	6.51673	6.49946	6.53383	6.52056	90.394	267.7	219.0	243.4
5	1.06050	1.38700	6.51625	6.49903	6.53313	6.52022	90.278	266.9	213.0	240.0
6	1.05942	1.38798	6.51539	6.49873	6.53303	6.51968	90.847	258.2	220.3	239.3
7	1.06140	1.38824	6.51530	6.49877	6.53254	6.51998	90.372	256.2	207.2	231.7
8	1.06035	1.38789	6.51462	6.49875	6.53278	6.52030	90.565	246.0	205.9	226.0
9	1.06017	1.38706	6.51451	6.49853	6.53276	6.51999	90.385	247.7	210.7	229.2
10	1.05928	1.38770	6.51446	6.49860	6.53254	6.52025	90.808	245.8	202.8	224.3
11	1.06069	1.38752	6.51460	6.49779	6.53298	6.51944	90.369	260.6	223.4	242.0
12	1.05973	1.38821	6.51418	6.49729	6.53243	6.51924	90.825	261.8	217.6	239.7
								253.0	211.3	



RESULTS OF LAST SIX READINGS			
90.554	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	232.1
		<i>and its standard devia.</i>	7.3

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON CO₃ SURFACE USING 115g DEAD-WEIGHT

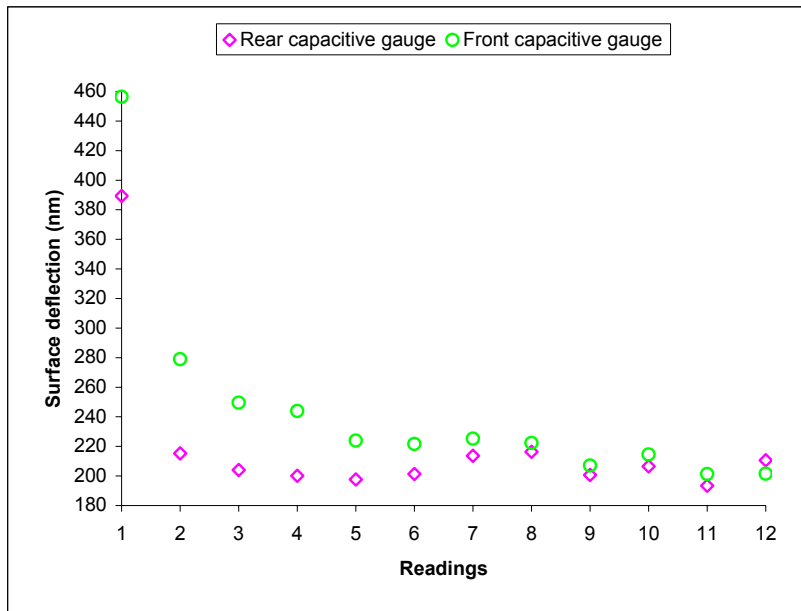
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.02832	1.45358	6.28425	6.25615	6.29944	6.27909	117.585	435.6	335.8	385.7
2	1.05193	1.45687	6.27758	6.25505	6.29355	6.27863	111.966	349.2	246.2	297.7
3	1.05441	1.45884	6.27343	6.25292	6.29030	6.27749	111.825	317.9	211.4	264.7
4	1.05297	1.45807	6.27581	6.25391	6.29230	6.27777	112.011	339.4	239.7	289.6
5	1.05348	1.45713	6.27634	6.25410	6.29236	6.27781	111.610	344.7	240.1	292.4
6	1.05332	1.45881	6.27394	6.25210	6.29084	6.27650	112.118	338.5	236.6	287.6
7	1.05349	1.45758	6.27498	6.25382	6.29239	6.27781	111.731	328.0	240.6	284.3
8	1.05356	1.45833	6.27495	6.25351	6.29160	6.27777	111.919	332.3	228.2	280.3
9	1.05475	1.45858	6.27441	6.25326	6.29129	6.27763	111.659	327.8	225.4	276.6
10	1.05281	1.45847	6.27409	6.25297	6.29071	6.27728	112.165	327.4	221.6	274.5
11	1.05163	1.45720	6.27659	6.25463	6.29211	6.27789	112.141	340.4	234.6	287.5
12	1.05380	1.45929	6.27365	6.25225	6.29044	6.27690	112.118	331.7	223.4	277.6
								331.3	229.0	



RESULTS OF LAST SIX READINGS			
111.956	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	280.1
		<i>and its standard devia.</i>	5.0

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON *A11* SURFACE USING 35g DEAD-WEIGHT

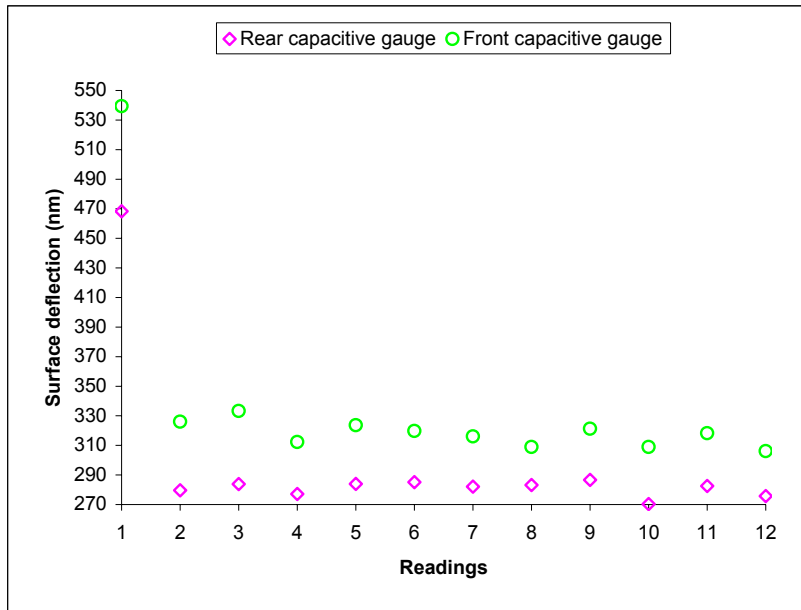
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.00396	1.12154	7.35952	7.33440	7.35418	7.32652	32.511	389.4	456.4	422.9
2	1.02441	1.12378	7.34747	7.33358	7.34155	7.32464	27.476	215.3	279.0	247.2
3	1.02598	1.12240	7.34653	7.33337	7.34009	7.32496	26.660	204.0	249.6	226.8
4	1.02650	1.12254	7.34568	7.33277	7.33864	7.32386	26.555	200.1	243.9	222.0
5	1.02675	1.12264	7.34602	7.33327	7.33837	7.32480	26.514	197.6	223.9	210.8
6	1.02561	1.12234	7.34540	7.33241	7.33752	7.32409	26.746	201.3	221.6	211.5
7	1.02711	1.12275	7.34559	7.33180	7.33736	7.32371	26.445	213.7	225.2	219.5
8	1.02597	1.12232	7.34558	7.33162	7.33719	7.32372	26.641	216.4	222.3	219.4
9	1.02756	1.12212	7.34447	7.33152	7.33621	7.32366	26.146	200.7	207.1	203.9
10	1.02645	1.12225	7.34451	7.33119	7.33637	7.32337	26.489	206.5	214.5	210.5
11	1.02710	1.12339	7.34429	7.33181	7.33598	7.32378	26.624	193.4	201.3	197.4
12	1.02823	1.12330	7.34422	7.33063	7.33571	7.32350	26.287	210.6	201.5	206.1
								206.9	212.0	



RESULTS OF LAST SIX READINGS			
26.439	Ave. change of load	Ave. resultant deflec.	209.4
		and its standard devia.	8.8

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON *A11* SURFACE USING 55g DEAD-WEIGHT

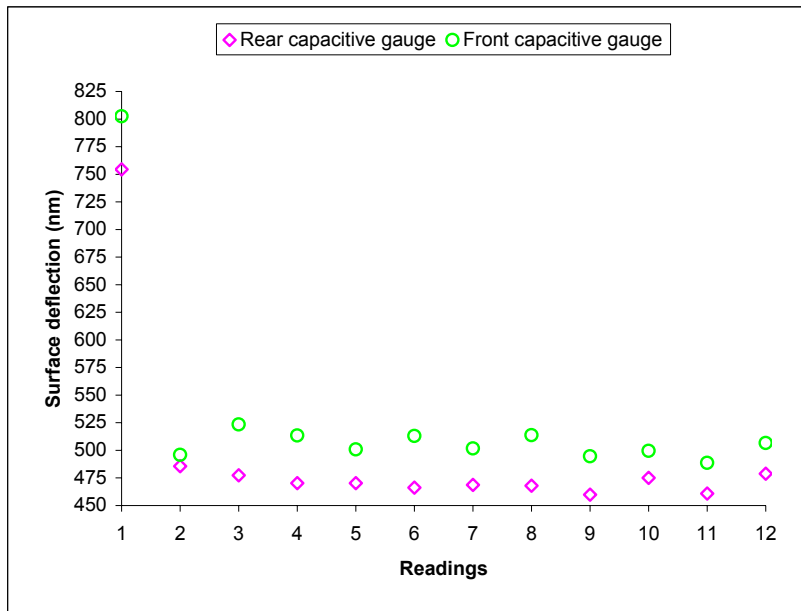
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.00176	1.19549	7.30936	7.27915	7.32345	7.29076	53.567	468.3	539.4	503.9
2	1.02555	1.19526	7.29533	7.27729	7.30950	7.28974	46.925	279.6	326.0	302.8
3	1.02688	1.19502	7.29496	7.27665	7.30890	7.28870	46.491	283.8	333.3	308.6
4	1.02905	1.19539	7.29404	7.27616	7.30762	7.28869	45.993	277.1	312.3	294.7
5	1.03009	1.19538	7.29435	7.27603	7.30770	7.28808	45.703	284.0	323.7	303.9
6	1.02732	1.19581	7.29423	7.27583	7.30826	7.28888	46.588	285.2	319.8	302.5
7	1.02885	1.19574	7.29413	7.27593	7.30792	7.28876	46.145	282.1	316.1	299.1
8	1.02809	1.19560	7.29415	7.27588	7.30804	7.28932	46.317	283.2	308.9	296.1
9	1.02993	1.19535	7.29423	7.27573	7.30820	7.28873	45.739	286.7	321.3	304.0
10	1.02910	1.19476	7.29360	7.27616	7.30761	7.28888	45.805	270.3	309.0	289.7
11	1.02943	1.19673	7.29369	7.27546	7.30735	7.28806	46.259	282.6	318.3	300.5
12	1.03042	1.19684	7.29308	7.27529	7.30641	7.28786	46.015	275.7	306.1	290.9
								280.1	313.3	



RESULTS OF LAST SIX READINGS			
46.047	Ave. change of load	Ave. resultant deflec.	296.7
		and its standard devia.	5.6

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON *A11* SURFACE USING 75g DEAD-WEIGHT

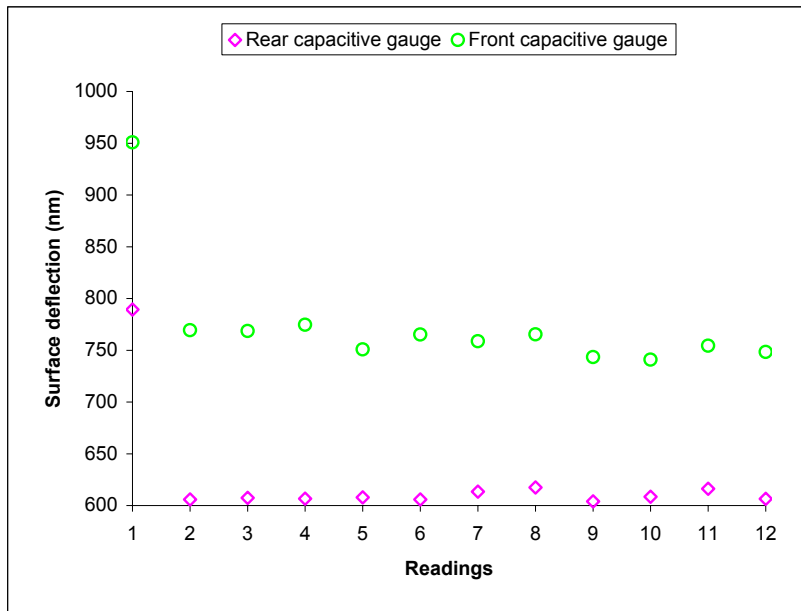
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.02331	1.28924	6.91480	6.86612	6.91840	6.86976	73.530	754.5	802.6	778.6
2	1.04519	1.28878	6.89678	6.86545	6.90119	6.87113	67.353	485.6	496.0	490.8
3	1.04522	1.28747	6.89591	6.86511	6.90117	6.86945	66.982	477.4	523.4	500.4
4	1.04521	1.28921	6.89520	6.86486	6.90044	6.86932	67.466	470.3	513.5	491.9
5	1.04599	1.28828	6.89500	6.86466	6.89985	6.86950	66.993	470.3	500.8	485.6
6	1.04668	1.28877	6.89497	6.86489	6.90100	6.86991	66.938	466.2	513.0	489.6
7	1.04698	1.28874	6.89471	6.86447	6.90005	6.86964	66.847	468.7	501.8	485.3
8	1.04608	1.28889	6.89491	6.86472	6.90046	6.86932	67.137	467.9	513.8	490.9
9	1.04649	1.28878	6.89412	6.86445	6.89924	6.86926	66.993	459.9	494.7	477.3
10	1.04640	1.28984	6.89462	6.86397	6.89965	6.86938	67.311	475.1	499.5	487.3
11	1.04614	1.28918	6.89455	6.86482	6.90007	6.87045	67.201	460.8	488.7	474.8
12	1.04676	1.29130	6.89446	6.86356	6.89969	6.86898	67.616	478.9	506.7	492.8
								468.6	500.9	



RESULTS OF LAST SIX READINGS			
67.184	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	484.7
			7.3

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON *A11* SURFACE USING 95g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.03077	1.37682	7.95207	7.90115	7.96038	7.90275	95.683	789.3	950.9	870.1
2	1.05499	1.37644	7.93998	7.90089	7.94852	7.90189	88.881	605.9	769.4	687.7
3	1.05637	1.37816	7.93935	7.90016	7.94763	7.90105	88.975	607.4	768.6	688.0
4	1.05816	1.37691	7.93888	7.89974	7.94761	7.90066	88.135	606.7	774.7	690.7
5	1.05912	1.37754	7.93803	7.89881	7.94582	7.90032	88.043	607.9	750.8	679.4
6	1.05762	1.37719	7.93824	7.89915	7.94579	7.89941	88.361	605.9	765.3	685.6
7	1.05656	1.37768	7.93809	7.89851	7.94520	7.89921	88.790	613.5	758.8	686.2
8	1.05739	1.37942	7.93770	7.89786	7.94481	7.89842	89.042	617.5	765.4	691.5
9	1.06013	1.37886	7.93716	7.89819	7.94454	7.89948	88.129	604.0	743.5	673.8
10	1.05928	1.37923	7.93688	7.89762	7.94401	7.89910	88.467	608.5	741.0	674.8
11	1.05977	1.37860	7.93773	7.89797	7.94489	7.89917	88.157	616.3	754.4	685.4
12	1.06027	1.38021	7.93680	7.89767	7.94391	7.89855	88.464	606.5	748.4	677.5
								611.1	751.9	

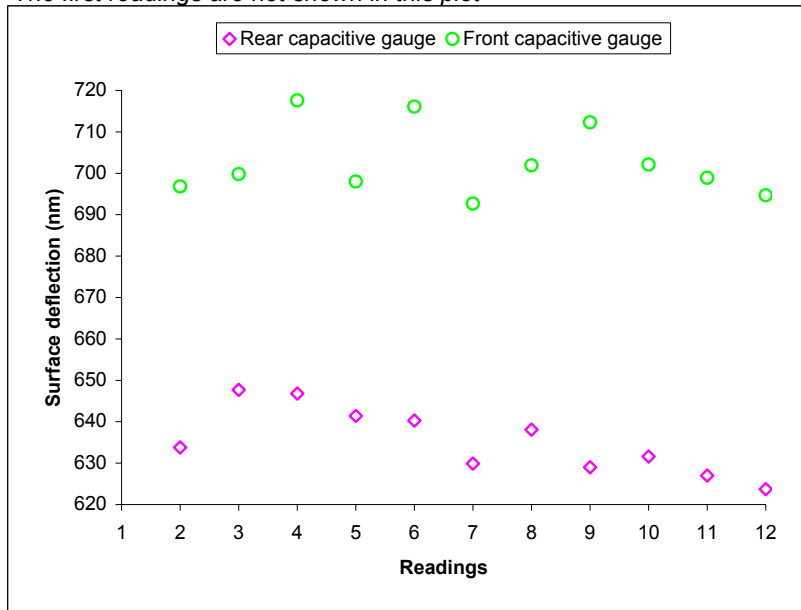


RESULTS OF LAST SIX READINGS			
88.508	Ave. change of load	Ave. resultant deflec.	681.5
		and its standard devia.	7.2

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON A/1 SURFACE USING 115g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.00434	1.42478	7.34908	7.25159	7.32405	7.22610	116.252	1511.1	1616.2	1563.7
2	1.04049	1.42615	7.29010	7.24921	7.26594	7.22371	106.635	633.8	696.8	665.3
3	1.04015	1.42632	7.29035	7.24856	7.26562	7.22321	106.776	647.7	699.8	673.8
4	1.04146	1.42784	7.28961	7.24788	7.26563	7.22214	106.834	646.8	717.6	682.2
5	1.04308	1.42413	7.28943	7.24805	7.26499	7.22269	105.361	641.4	698.0	669.7
6	1.04217	1.42507	7.28902	7.24771	7.26569	7.22229	105.872	640.3	716.1	678.2
7	1.04174	1.42561	7.28900	7.24836	7.26533	7.22335	106.140	629.9	692.7	661.3
8	1.04221	1.42548	7.28859	7.24742	7.26475	7.22221	105.975	638.1	701.9	670.0
9	1.04389	1.42434	7.28845	7.24787	7.26472	7.22155	105.195	629.0	712.3	670.7
10	1.04437	1.42519	7.28803	7.24728	7.26492	7.22237	105.297	631.6	702.1	666.9
11	1.04482	1.42367	7.28748	7.24703	7.26475	7.22239	104.752	627.0	698.9	663.0
12	1.04438	1.42363	7.28739	7.24715	7.26552	7.22342	104.863	623.7	694.7	659.2
								629.9	700.4	

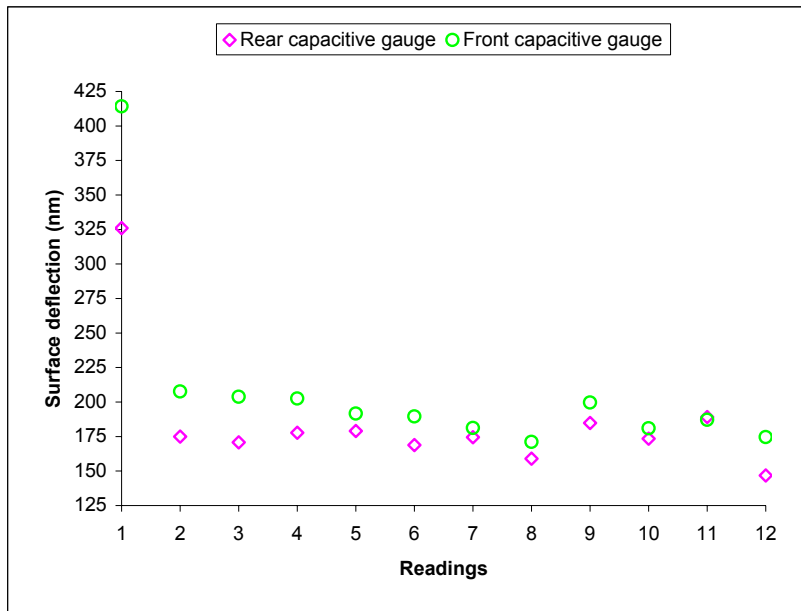
The first readings are not shown in this plot



RESULTS OF LAST SIX READINGS			
105.370	Ave. change of load	Ave. resultant deflec.	665.2
		and its standard devia.	4.7

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON A/2 SURFACE USING 35g DEAD-WEIGHT

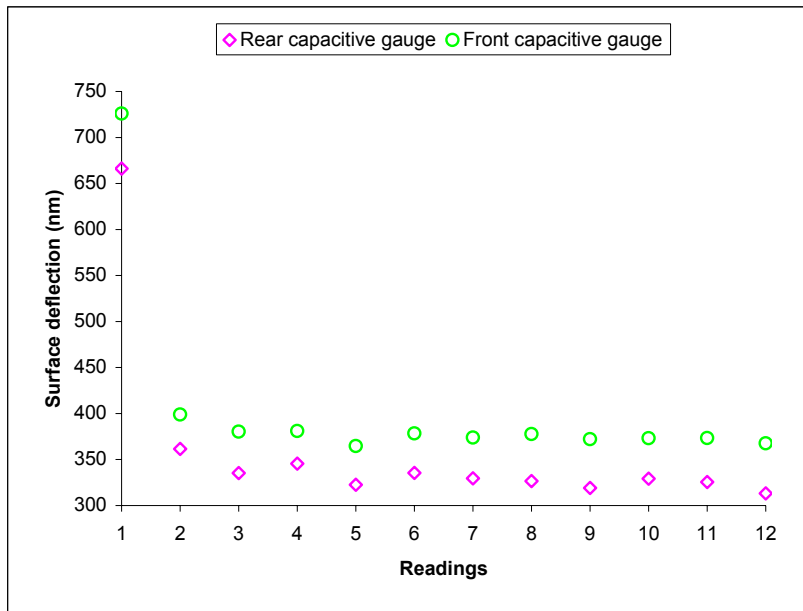
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06525	1.17044	7.00294	6.98191	7.01095	6.98585	29.085	326.0	414.2	370.1
2	1.10176	1.17118	6.99201	6.98072	6.99648	6.98390	19.195	175.0	207.6	191.3
3	1.10163	1.17190	6.99137	6.98035	6.99591	6.98356	19.430	170.8	203.8	187.3
4	1.10308	1.17255	6.99132	6.97985	6.99540	6.98312	19.209	177.8	202.6	190.2
5	1.10441	1.17359	6.99071	6.97916	6.99447	6.98286	19.128	179.0	191.6	185.3
6	1.10475	1.17416	6.99021	6.97932	6.99422	6.98273	19.192	168.8	189.6	179.2
7	1.10388	1.17398	6.99065	6.97939	6.99394	6.98296	19.383	174.5	181.2	177.9
8	1.10485	1.17396	6.99011	6.97985	6.99345	6.98308	19.109	159.0	171.1	165.1
9	1.10459	1.17441	6.99101	6.97909	6.99437	6.98227	19.305	184.8	199.7	192.3
10	1.10652	1.17545	6.99006	6.97887	6.99308	6.98211	19.059	173.4	181.0	177.2
11	1.10717	1.17586	6.99067	6.97847	6.99326	6.98192	18.993	189.1	187.1	188.1
12	1.10658	1.17502	6.98882	6.97935	6.99236	6.98178	18.924	146.8	174.6	160.7
								171.3	182.5	



RESULTS OF LAST SIX READINGS			
19.129	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	176.9
		<i>and its standard devia.</i>	12.4

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON A/2 SURFACE USING 55g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.07063	1.25926	6.45979	6.41681	6.47420	6.43020	52.156	666.2	726.0	696.1
2	1.12121	1.25639	6.44025	6.41693	6.45488	6.43070	37.377	361.5	399.0	380.3
3	1.12557	1.25401	6.43878	6.41715	6.45460	6.43155	35.514	335.3	380.3	357.8
4	1.12653	1.25304	6.43934	6.41705	6.45482	6.43172	34.980	345.5	381.1	363.3
5	1.12666	1.25281	6.43872	6.41791	6.45481	6.43271	34.881	322.6	364.7	343.7
6	1.12729	1.25418	6.43837	6.41673	6.45482	6.43188	35.085	335.4	378.5	357.0
7	1.12772	1.25217	6.43836	6.41710	6.45461	6.43195	34.411	329.5	373.9	351.7
8	1.12757	1.25234	6.43795	6.41688	6.45449	6.43159	34.499	326.6	377.8	352.2
9	1.12722	1.25173	6.43821	6.41762	6.45450	6.43195	34.427	319.1	372.1	345.6
10	1.12813	1.25239	6.43806	6.41682	6.45426	6.43164	34.358	329.2	373.2	351.2
11	1.12817	1.25229	6.43786	6.41686	6.45406	6.43143	34.319	325.5	373.4	349.5
12	1.12814	1.25115	6.43752	6.41731	6.45383	6.43155	34.012	313.3	367.6	340.5
								323.9	373.0	

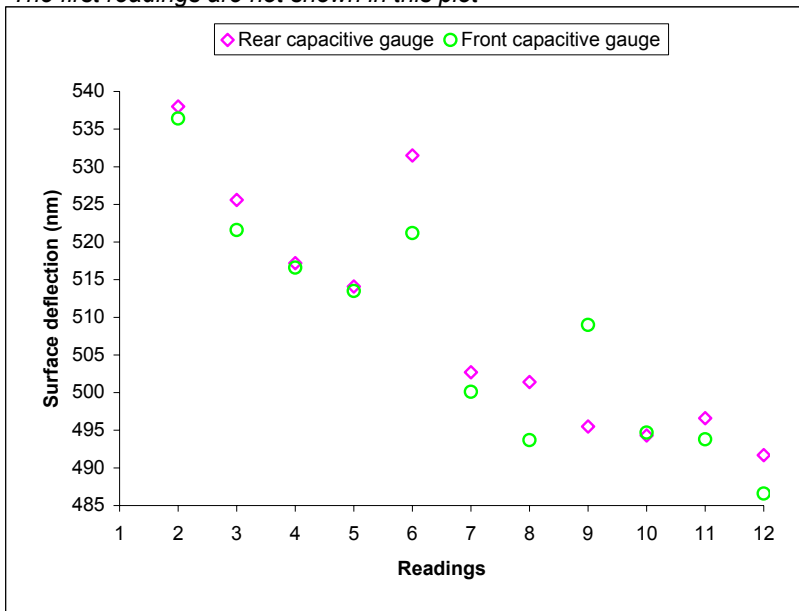


RESULTS OF LAST SIX READINGS			
34.338	Ave. change of load	Ave. resultant deflec.	348.4
		and its standard devia.	4.6

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON A/2 SURFACE USING 75g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06383	1.32454	7.16761	7.11250	7.19329	7.13910	72.087	854.2	894.1	874.2
2	1.11486	1.32164	7.14654	7.11183	7.17168	7.13917	57.175	538.0	536.4	537.2
3	1.11699	1.31964	7.14533	7.11142	7.17087	7.13926	56.033	525.6	521.6	523.6
4	1.11774	1.31789	7.14467	7.11130	7.17059	7.13928	55.342	517.2	516.6	516.9
5	1.11842	1.31785	7.14431	7.11114	7.17044	7.13932	55.143	514.1	513.5	513.8
6	1.11895	1.31707	7.14525	7.11096	7.17072	7.13913	54.780	531.5	521.2	526.4
7	1.12013	1.31647	7.14349	7.11106	7.16968	7.13937	54.288	502.7	500.1	501.4
8	1.11964	1.31671	7.14296	7.11061	7.16916	7.13924	54.490	501.4	493.7	497.6
9	1.12107	1.31602	7.14297	7.11100	7.17012	7.13927	53.904	495.5	509.0	502.3
10	1.12113	1.31645	7.14300	7.11111	7.16914	7.13916	54.006	494.3	494.7	494.5
11	1.12079	1.31463	7.14299	7.11095	7.16882	7.13889	53.597	496.6	493.8	495.2
12	1.12108	1.31540	7.14248	7.11076	7.16871	7.13922	53.730	491.7	486.6	489.2
								497.0	496.3	

The first readings are not shown in this plot

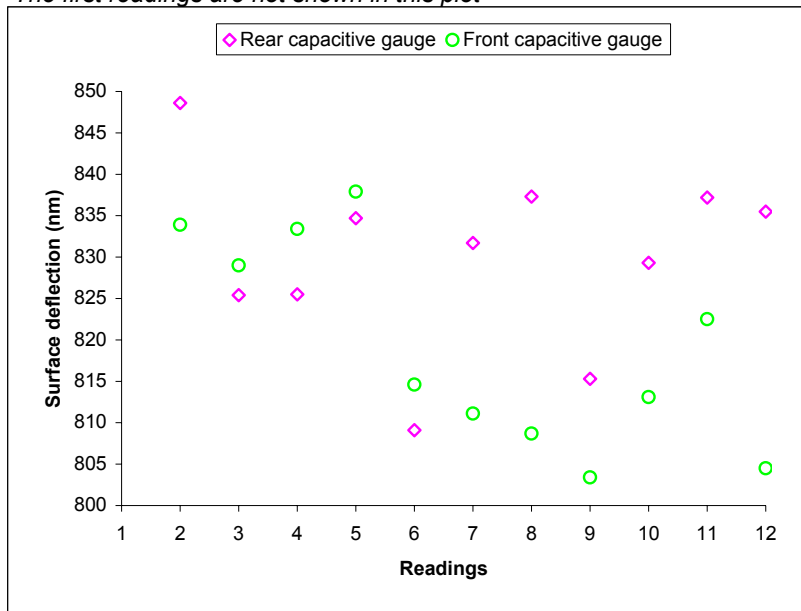


RESULTS OF LAST SIX READINGS			
54.003	Ave. change of load	Ave. resultant deflec.	496.7
		and its standard devia.	4.9

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON $A/2$ SURFACE USING 95g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.05728	1.39884	7.03815	6.95153	7.04887	6.96331	94.442	1342.6	1411.7	1377.2
2	1.10886	1.39609	7.00474	6.94999	7.01234	6.96180	79.419	848.6	833.9	841.3
3	1.11299	1.39628	7.00308	6.94983	7.01160	6.96136	78.330	825.4	829.0	827.2
4	1.11465	1.39873	7.00239	6.94913	7.01076	6.96025	78.548	825.5	833.4	829.5
5	1.11394	1.39649	7.00216	6.94831	7.01014	6.95936	78.125	834.7	837.9	836.3
6	1.11462	1.39590	7.00200	6.94980	7.00916	6.95979	77.774	809.1	814.6	811.9
7	1.11407	1.39498	7.00169	6.94803	7.00855	6.95939	77.672	831.7	811.1	821.4
8	1.11493	1.39577	7.00156	6.94754	7.00805	6.95904	77.653	837.3	808.7	823.0
9	1.11372	1.39382	7.00139	6.94879	7.00778	6.95909	77.448	815.3	803.4	809.4
10	1.11444	1.39442	7.00098	6.94748	7.00737	6.95809	77.415	829.3	813.1	821.2
11	1.11462	1.39428	7.00150	6.94749	7.00809	6.95824	77.326	837.2	822.5	829.9
12	1.11469	1.39416	7.00081	6.94691	7.00713	6.95837	77.274	835.5	804.5	820.0
								831.1	810.6	

The first readings are not shown in this plot

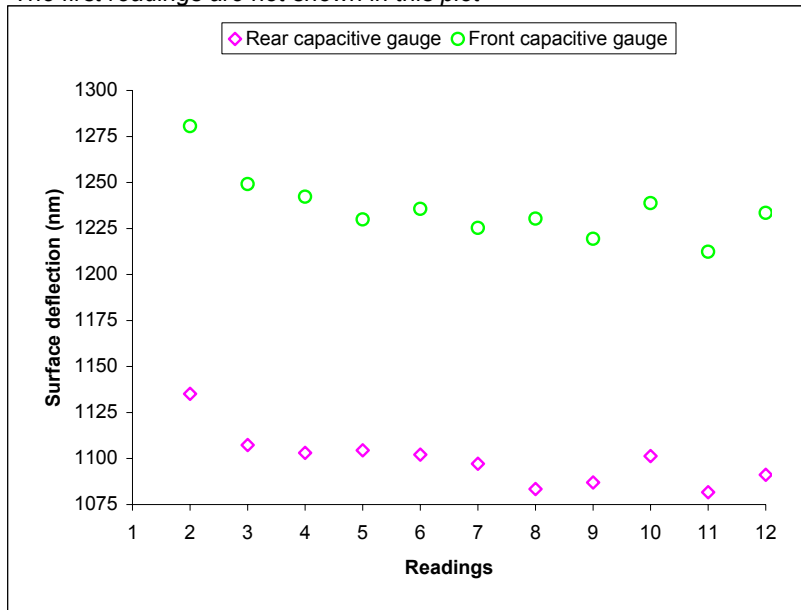


RESULTS OF LAST SIX READINGS			
77.465	Ave. change of load	Ave. resultant deflec.	820.8
		and its standard devia.	6.6

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON A/2 SURFACE USING 115g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06258	1.48490	6.86770	6.75476	6.87522	6.75526	116.772	1750.6	1979.3	1865.0
2	1.10521	1.48380	6.82591	6.75267	6.83019	6.75258	104.681	1135.2	1280.6	1207.9
3	1.10863	1.48264	6.82323	6.75179	6.82828	6.75258	103.414	1107.3	1249.1	1178.2
4	1.10930	1.48119	6.82225	6.75108	6.82674	6.75145	102.828	1103.1	1242.3	1172.7
5	1.11095	1.48122	6.82162	6.75036	6.82623	6.75169	102.380	1104.5	1229.9	1167.2
6	1.11201	1.48154	6.82094	6.74984	6.82608	6.75119	102.175	1102.1	1235.7	1168.9
7	1.11292	1.47946	6.82081	6.75002	6.82599	6.75173	101.349	1097.2	1225.3	1161.3
8	1.11207	1.47859	6.82017	6.75027	6.82580	6.75123	101.343	1083.4	1230.4	1156.9
9	1.11374	1.47951	6.81965	6.74952	6.82480	6.75090	101.136	1087.0	1219.4	1153.2
10	1.11332	1.47791	6.82042	6.74937	6.82619	6.75111	100.810	1101.3	1238.8	1170.1
11	1.11352	1.47894	6.81867	6.74888	6.82429	6.75081	101.039	1081.7	1212.4	1147.1
12	1.11380	1.47937	6.81910	6.74870	6.82520	6.75044	101.080	1091.2	1233.5	1162.4
								1090.3	1226.6	

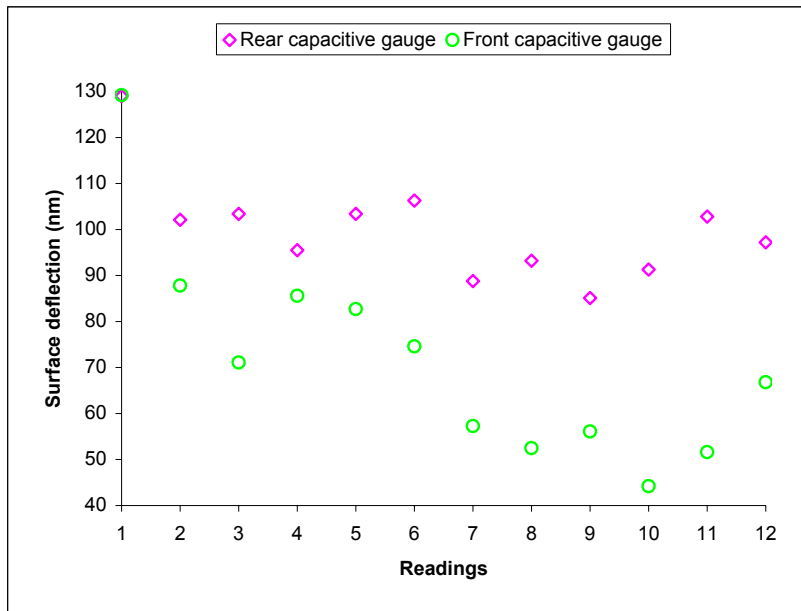
The first readings are not shown in this plot



RESULTS OF LAST SIX READINGS			
101.126	Ave. change of load	Ave. resultant deflec.	1158.5
		and its standard devia.	8.0

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON A/3 SURFACE USING 35g DEAD-WEIGHT

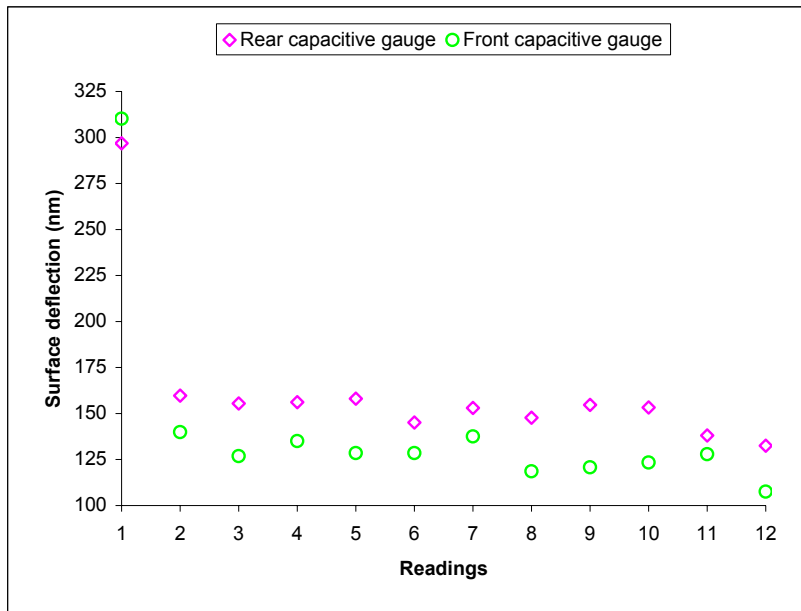
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06239	1.16489	7.41415	7.40583	7.43275	7.42492	28.341	129.0	129.2	129.1
2	1.08993	1.16809	7.41077	7.40418	7.42970	7.42438	21.611	102.1	87.8	95.0
3	1.08909	1.16846	7.41141	7.40474	7.42933	7.42502	21.946	103.4	71.1	87.3
4	1.09063	1.16911	7.41062	7.40446	7.42919	7.42400	21.700	95.5	85.6	90.6
5	1.09090	1.16930	7.41066	7.40399	7.42865	7.42364	21.678	103.4	82.7	93.1
6	1.09050	1.16917	7.41145	7.40459	7.42913	7.42461	21.752	106.3	74.6	90.5
7	1.09076	1.16907	7.41069	7.40496	7.42859	7.42512	21.653	88.8	57.3	73.1
8	1.08745	1.16654	7.41088	7.40487	7.42814	7.42496	21.868	93.2	52.5	72.9
9	1.09128	1.16840	7.40989	7.40440	7.42781	7.42441	21.324	85.1	56.1	70.6
10	1.09125	1.16817	7.41048	7.40459	7.42794	7.42526	21.268	91.3	44.2	67.8
11	1.09147	1.17102	7.41007	7.40344	7.42768	7.42455	21.996	102.8	51.6	77.2
12	1.09334	1.17148	7.41028	7.40401	7.42810	7.42405	21.606	97.2	66.8	82.0
								93.1	54.8	



RESULTS OF LAST SIX READINGS			
21.619	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	73.9
		<i>and its standard devia.</i>	5.0

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON A/3 SURFACE USING 55g DEAD-WEIGHT

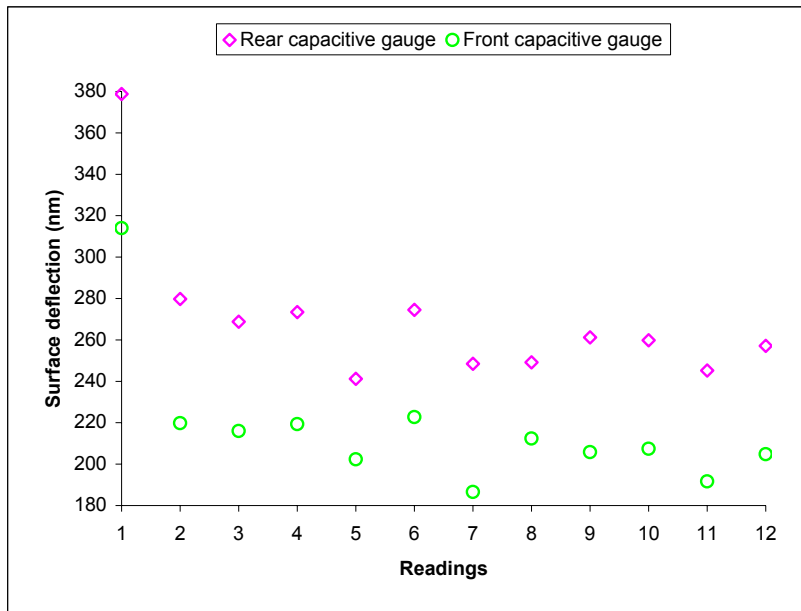
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.03928	1.22598	6.24452	6.22537	6.24955	6.23075	51.623	296.8	310.2	303.5
2	1.08315	1.22407	6.23526	6.22496	6.23901	6.23053	38.965	159.7	139.9	149.8
3	1.08459	1.22295	6.23459	6.22456	6.23926	6.23157	38.257	155.5	126.9	141.2
4	1.08691	1.22447	6.23412	6.22404	6.23877	6.23059	38.035	156.2	135.0	145.6
5	1.08755	1.22426	6.23422	6.22402	6.23827	6.23048	37.800	158.1	128.5	143.3
6	1.08770	1.22393	6.23307	6.22371	6.23806	6.23027	37.668	145.1	128.5	136.8
7	1.08821	1.22396	6.23393	6.22406	6.23896	6.23062	37.535	153.0	137.6	145.3
8	1.08866	1.22405	6.23363	6.22410	6.23767	6.23048	37.435	147.7	118.6	133.2
9	1.09044	1.22404	6.23384	6.22386	6.23782	6.23050	36.941	154.7	120.8	137.8
10	1.08952	1.22401	6.23344	6.22355	6.23796	6.23048	37.187	153.3	123.4	138.4
11	1.09006	1.22516	6.23247	6.22356	6.23823	6.23048	37.355	138.1	127.9	133.0
12	1.08960	1.22312	6.23327	6.22472	6.23788	6.23136	36.918	132.5	107.6	120.1
								146.6	122.7	



RESULTS OF LAST SIX READINGS			
37.229	Ave. change of load	Ave. resultant deflec. and its standard devia.	134.6
			8.4

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON A/3 SURFACE USING 75g DEAD-WEIGHT

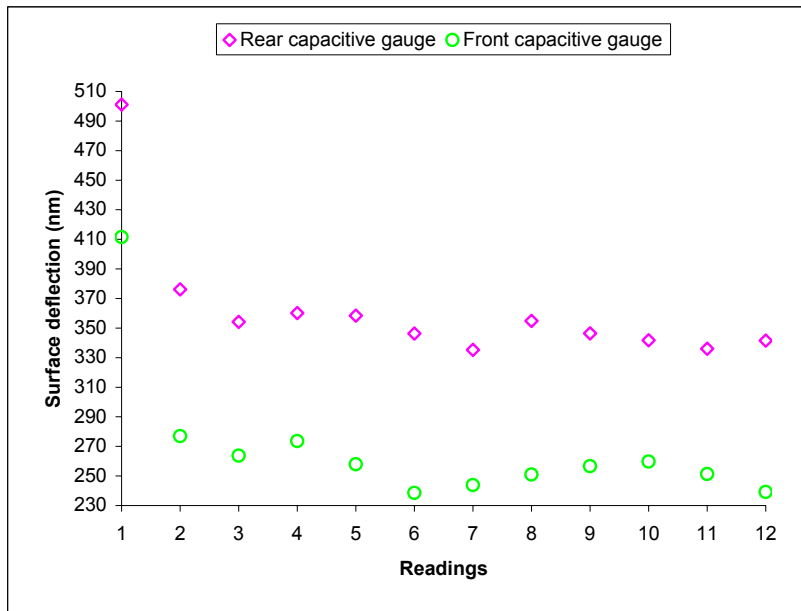
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.05226	1.30977	7.94652	7.92208	7.95931	7.94028	71.202	378.8	314.0	346.4
2	1.08558	1.31148	7.93915	7.92110	7.95354	7.94022	62.462	279.8	219.8	249.8
3	1.08855	1.30940	7.93853	7.92119	7.95390	7.94081	61.065	268.8	216.0	242.4
4	1.09037	1.31051	7.93844	7.92080	7.95362	7.94033	60.869	273.4	219.3	246.4
5	1.09036	1.30901	7.93806	7.92250	7.95373	7.94147	60.457	241.2	202.3	221.8
6	1.09080	1.30867	7.93870	7.92099	7.95454	7.94104	60.241	274.5	222.7	248.6
7	1.09329	1.30915	7.93755	7.92152	7.95379	7.94248	59.686	248.5	186.6	217.6
8	1.09321	1.30881	7.93662	7.92054	7.95364	7.94077	59.614	249.2	212.4	230.8
9	1.09258	1.30871	7.93748	7.92063	7.95346	7.94099	59.760	261.2	205.8	233.5
10	1.09240	1.30672	7.93735	7.92059	7.95359	7.94102	59.260	259.8	207.4	233.6
11	1.09322	1.30910	7.93687	7.92105	7.95364	7.94202	59.691	245.2	191.7	218.5
12	1.09406	1.30877	7.93724	7.92065	7.95381	7.94140	59.368	257.1	204.8	231.0
								253.5	201.5	



RESULTS OF LAST SIX READINGS			
59.563	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	227.5
		<i>and its standard devia.</i>	7.4

SAME-POINT REPEATED CONTACTS WITH 5MM TIP ON A/3 SURFACE USING 95g DEAD-WEIGHT

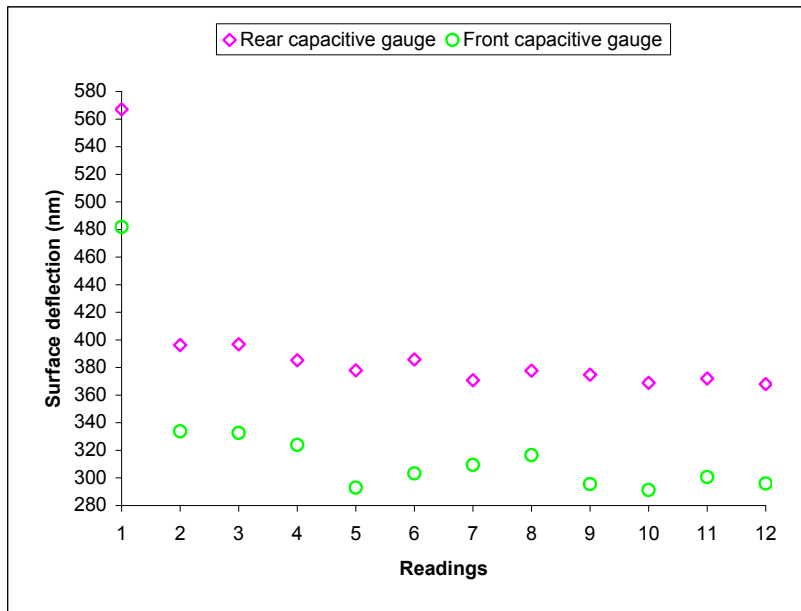
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.05273	1.38573	7.25131	7.21898	7.26889	7.24395	92.075	501.1	411.5	456.3
2	1.08930	1.38499	7.24225	7.21798	7.25970	7.24291	81.759	376.2	277.0	326.6
3	1.09107	1.38399	7.24141	7.21856	7.25859	7.24260	80.993	354.2	263.8	309.0
4	1.09315	1.38360	7.24057	7.21733	7.25854	7.24196	80.310	360.2	273.6	316.9
5	1.09160	1.38263	7.24042	7.21730	7.25716	7.24153	80.470	358.4	257.9	308.2
6	1.09364	1.38121	7.24004	7.21770	7.25705	7.24259	79.513	346.3	238.6	292.5
7	1.09456	1.38235	7.23961	7.21798	7.25664	7.24186	79.574	335.3	243.9	289.6
8	1.09520	1.38299	7.23990	7.21700	7.25662	7.24141	79.574	354.9	251.0	303.0
9	1.09471	1.38264	7.23920	7.21685	7.25633	7.24078	79.613	346.4	256.6	301.5
10	1.09514	1.38209	7.23888	7.21683	7.25681	7.24107	79.342	341.8	259.7	300.8
11	1.09548	1.38250	7.23881	7.21713	7.25609	7.24086	79.361	336.0	251.3	293.7
12	1.09545	1.38341	7.23854	7.21651	7.25610	7.24160	79.621	341.5	239.2	290.4
								342.7	250.3	



RESULTS OF LAST SIX READINGS			
79.514	Ave. change of load	Ave. resultant deflec.	296.5
		and its standard devia.	6.0

SAME-POINT REPEATED CONTACTS WITH 5mm TIP ON A/3 SURFACE USING 115g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (nm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.08099	1.48493	7.15630	7.11972	7.16954	7.14034	111.690	567.0	481.8	524.4
2	1.12211	1.48199	7.14452	7.11895	7.15912	7.13889	99.507	396.3	333.8	365.1
3	1.12503	1.48167	7.14339	7.11779	7.15798	7.13782	98.611	396.8	332.6	364.7
4	1.12559	1.47995	7.14305	7.11820	7.15786	7.13823	97.981	385.2	323.9	354.6
5	1.12832	1.48184	7.14230	7.11791	7.15626	7.13850	97.749	378.0	293.0	335.5
6	1.12772	1.47987	7.14200	7.11711	7.15658	7.13820	97.370	385.8	303.3	344.6
7	1.12920	1.47851	7.14179	7.11787	7.15709	7.13833	96.585	370.8	309.5	340.2
8	1.12952	1.48054	7.14125	7.11688	7.15632	7.13714	97.057	377.7	316.5	347.1
9	1.12949	1.47853	7.14108	7.11690	7.15513	7.13722	96.510	374.8	295.5	335.2
10	1.12938	1.47879	7.14044	7.11664	7.15527	7.13762	96.612	368.9	291.2	330.1
11	1.13018	1.47993	7.14042	7.11642	7.15549	7.13727	96.706	372.0	300.6	336.3
12	1.13005	1.47931	7.13984	7.11610	7.15539	7.13745	96.571	368.0	296.0	332.0
								372.0	301.6	



RESULTS OF LAST SIX READINGS			
96.674	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	336.8
		<i>and its standard devia.</i>	6.1