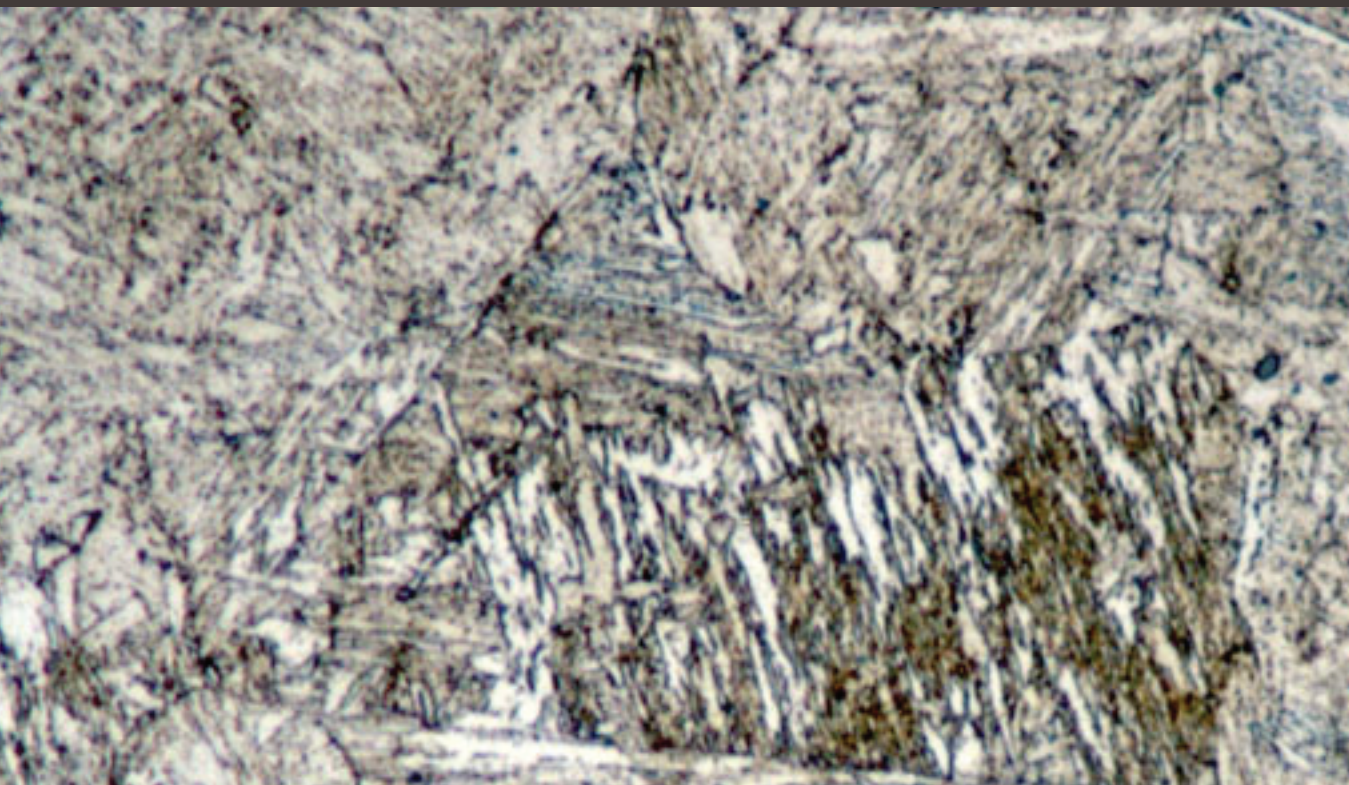
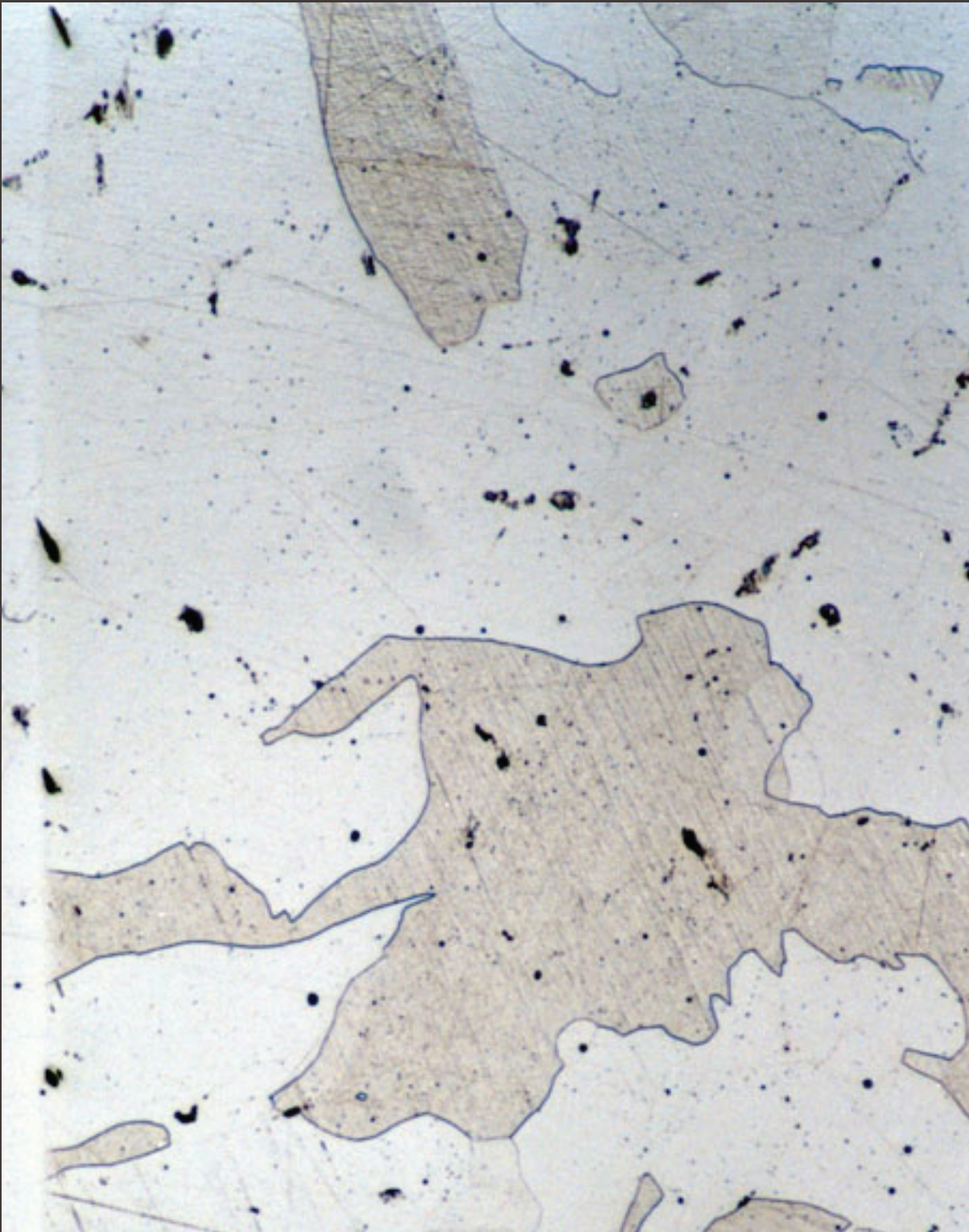


Cylindrical Correction									
Scales C, D, A - Diamond Indenter									
Observed Reading	1/8" 3.2mm	1/4" 6.4mm	3/8" 10mm	1/2" 13mm	5/8" 16mm	3/4" 19mm	7/8" 22mm	1" 25mm	
90	-	0.5	0.0	0.0	0.0	0.0	0.0	0.0	
85	-	0.5	0.5	0.5	0.0	0.0	0.0	0.0	
80	-	0.5	0.5	0.5	0.5	0.5	0.0	0.0	
75	-	1.0	0.5	0.5	0.5	0.5	0.5	0.0	
70	-	1.0	1.0	0.5	0.5	0.5	0.5	0.5	
65	-	1.5	1.0	1.0	0.5	0.5	0.5	0.5	
60	-	1.5	1.0	1.0	0.5	0.5	0.5	0.5	
55	-	2.0	1.5	1.0	1.0	0.5	0.5	0.5	
50	-	2.5	2.0	1.5	1.0	1.0	0.5	0.5	
45	-	3.0	2.0	1.5	1.5	1.0	1.0	0.5	
40	-	3.5	2.5	2.0	1.5	1.0	1.0	1.0	
35	-	4.0	3.0	2.0	1.5	1.5	1.0	1.0	
30	-	5.0	3.5	2.5	2.0	1.5	1.5	1.0	
25	-	5.5	4.0	3.0	2.5	2.0	1.5	1.0	
20	-	6.0	4.5	3.5	2.5	2.0	1.5	1.5	
Scales B, F, G - 1/16" Ball Indenter									
100	-	3.5	2.5	1.5	1.5	1.0	1.0	0.5	
90	-	4.0	3.0	2.0	1.5	1.5	1.5	1.0	
80	-	5.0	3.5	2.5	2.0	1.5	1.5	1.5	
70	-	6.0	4.0	3.0	2.5	2.0	2.0	1.5	
60	-	7.0	5.0	3.5	3.0	2.5	2.0	2.0	
50	-	8.0	5.5	4.0	3.5	3.0	2.5	2.0	
40	-	9.0	6.0	4.5	4.0	3.0	2.5	2.5	
30	-	10.0	6.5	5.0	4.5	3.5	3.0	2.5	
20	-	11.0	7.5	5.5	4.5	4.0	3.5	3.0	
10	-	12.0	8.0	6.0	5.0	4.0	3.5	3.0	
0	-	12.5	8.5	6.5	5.5	4.5	3.5	3.0	
Scales 15N, 30N, 45N - N Diamond Indenter									
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
85	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	
80	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	
75	1.5	1.0	0.5	0.5	0.5	0.5	0.0	0.0	
70	2.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	
65	2.5	1.5	1.0	0.5	0.5	0.5	0.5	0.5	
60	3.0	1.5	1.0	1.0	1.0	0.5	0.5	0.5	
55	3.5	2.0	1.5	1.0	1.0	0.5	0.5	0.5	
50	3.5	2.0	1.5	1.0	1.0	1.0	1.0	0.5	
45	4.0	2.0	1.5	1.0	1.0	1.0	1.0	1.0	
40	4.5	2.5	1.5	1.5	1.0	1.0	1.0	1.0	
35	5.0	2.5	2.0	1.5	1.0	1.0	1.0	1.0	
30	5.5	3.0	2.0	1.5	1.5	1.0	1.0	1.0	
25	5.5	3.0	2.0	1.5	1.5	1.5	1.5	1.0	
20	6.0	3.0	2.0	1.5	1.5	1.5	1.5	1.5	
Scales 15T, 30T, 45T - 1/16" Ball Indenter									
90	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	
80	3.0	2.0	1.5	1.5	1.0	1.0	1.0	0.5	
70	5.0	3.5	2.5	2.0	1.5	1.0	1.0	1.0	
60	6.5	4.5	3.0	2.5	2.0	1.5	1.5	1.5	
50	8.5	5.5	4.0	3.0	2.5	2.0	2.0	1.5	
40	10.0	6.5	4.5	3.5	3.0	2.5	2.0	2.0	
30	11.5	7.5	5.0	3.5	3.5	2.5	2.0	2.0	
20	13.0	9.0	6.0	4.5	4.0	3.0	2.0	2.0	



Cylindrical Correction							
Greater thickness and hardness can be tested here		Rockwell Superficial Hardness Scales			Rockwell Superficial Hardness Scales		
		N Diamond Indenter			Diamond Indenter		
		15N 15kgf	30N 30kgf	45N 45kgf	A 60kgf	D 100kgf	C 150kgf
Thickness Inches	mm						
.006	.15	92	-	-	-	-	-
.008	.20	90	-	-	-	-	-
.010	.25	88	-	-	-	-	-
.012	.30	83	82	77	-	-	-
.014	.36	76	78.5	74	-	-	-
.016	.41	68	74	72	86	-	-
.018	.46	X	66	68	84	-	-
.020	.46	X	57	63	82	77	-
.022	.56	X	47	58	79	75	69
.024	.61	X	X	51	76	72	67
.026	.66	X	X	37	71	68	65
.028	.71	X	X	20	67	63	62
.030	.76	X	X	X	60	58	57
.032	.81	X	X	X	X	51	52
.034	.86	X	X	X	X	43	45
.036	.91	X	X	X	X	X	37
.038	.96	X	X	X	X	X	28
.040	1.02	X	X	X	X	X	20
1/16" Ball Indenter							
.010	.25	91	-	-	-	-	-
.012	.30	86	-	-	-	-	-
.014	.36	81	80	-	-	-	-
.016	.41	75	72	71	-	-	-
.018	.46	68	64	62	-	-	-
.020	.46	X	55	53	-	-	-
.022	.56	X	45	43	-	-	-
.024	.61	X	34	31	98	94	94
.026	.66	X	X	18	91	87	87
.028	.71	X	X	4	85	80	76
.030	.76	X	X	X	77	71	68
.032	.81	X	X	X	69	62	59
.034	.86	X	X	X	X	52	50
.036	.91	X	X	X	X	40	42
.038	.96	X	X	X	X	28	31
.040	1.02	X	X	X	X	X	22



Rockwell Scales						Vickers	Knoop	Brinell		Tensile Strength
C 150Kgf. C Dia.	A 60Kgf. A Dia.	D 100Kgf. D Dia.	15-N 15Kgf. N Dia.	30-N 30Kgf. N Dia.	45-N 45Kgf. N Dia.	HV 10Kgf.	HK 500Gf. & Up	3000 Kgf. 10mm Ball	HB	KSI 1000Lbs Sq Inch
70	86.5	78.5	94.0	86.0	77.5	1076	972	-	-	
69	86.0	78.0	93.5	85.0	76.5	1004	946	-	-	
68	85.5	77.0	93.0	84.5	75.5	940	920	-	-	
67	85.0	76.0	93.0	83.5	74.0	900	895	-	-	
66	84.5	75.5	82.5	83.0	73.5	865	870	-	-	
65	84.0	74.5	92.0	82.0	72.0	832	846	2.25	745	
64	83.5	74.0	92.0	81.0	71.0	800	822	2.28	725	
63	83.0	73.0	91.5	80.0	70.0	772	799	2.30	712	
62	82.5	72.0	91.0	79.5	69.0	746	776	2.35	682	
61	82.0	71.5	90.5	78.5	67.5	720	754	2.37	670	
60	81.0	70.5	90.0	77.5	66.5	697	732	2.40	653	
59	80.5	70.0	90.0	76.5	65.5	674	710	2.45	627	351
58	80.0	69.0	89.5	75.5	64.5	653	690	2.50	601	338
57	79.5	68.5	89.0	75.0	63.0	633	670	2.55	578	325
56	79.0	67.5	88.5	74.0	62.0	613	650	2.57	569	313
55	78.5	67.0	88.0	73.0	61.0	595	630	2.60	555	301
54	78.0	66.0	87.5	72.0	60.0	577	612	2.65	534	292
53	77.5	65.5	87.0	71.0	58.5	560	594	2.68	522	283
52	77.0	64.5	86.5	70.0	57.5	544	576	2.70	514	273
51	76.5	64.0	86.0	69.5	56.0	528	558	2.75	495	264
50	76.0	63.0	85.5	68.5	55.0	513	542	2.78	485	255
49	75.0	62.0	85.0	67.5	54.0	498	526	2.80	477	246
48	74.5	61.5	84.5	66.5	52.5	484	510	2.85	461	238
47	74.0	61.0	84.0	66.0	51.5	471	495	2.88	451	229
46	73.5	60.0	83.5	65.0	50.5	458	480	2.90	444	221
45	73.0	59.0	83.0	64.0	49.0	446	466	2.95	429	215
44	72.5	58.5	82.5	63.0	48.0	434	452	3.00	415	208
43	72.0	57.5	82.0	62.0	46.5	423	438	3.05	401	201
42	71.5	57.0	81.5	61.5	45.5	412	426	3.08	393	194
41	71.0	56.0	81.0	60.5	44.5	402	414	3.10	388	188
40	70.5	55.5	80.5	59.5	43.0	392	402	3.15	375	182
39	70.0	54.5	80.0	58.5	42.0	382	391	3.20	363	177
38	69.5	54.0	79.5	57.5	41.0	372	380	3.25	352	171
37	69.0	53.0	79.0	57.0	39.5	363	370	3.30	341	166
36	68.5	52.5	78.5	56.0	38.5	354	360	3.35	331	161
35	68.0	51.5	77.5	55.0	37.0	345	351	3.38	325	156
34	67.5	51.0	77.0	54.0	36.0	336	342	3.40	321	152
33	67.0	50.0	76.5	53.5	35.0	327	334	3.45	311	149
32	66.5	49.0	76.0	52.0	33.5	318	326	3.50	302	146
31	66.0	48.5	75.5	51.5	32.5	310	318	3.55	293	141
30	65.5	47.5	75.0	50.5	31.5	302	311	3.60	285	138
29	65.0	47.0	74.5	49.5	30.0	294	304	3.65	277	135
28	64.5	46.0	74.0	48.5	29.0	286	297	3.70	269	131
27	64.0	45.0	73.5	47.5	28.0	279	290	3.75	262	128
26	63.5	44.5	73.0	47.0	26.5	272	294	3.78	257	125
25	63.0	44.0	72.0	46.0	25.5	266	278	3.80	255	123
24	62.5	43.0	71.5	45.0	24.5	260	272	3.85	248	119
23	62.0	42.0	71.0	44.0	23.0	254	266	3.90	241	117
22	61.5	41.5	70.5	43.0	22.0	248	261	3.95	235	115
21	61.0	41.0	70.0	42.5	20.5	243	256	4.00	229	112
20	60.5	40.0	69.5	41.5	19.5	238	251	4.05	223	110