

Wilson Cylindrical Correction Chart #53

Cylindrical Work Corrections to be Added to Observed Rockwell Number

Observed Dial Reading "C"/"D"/"A" Scale	DIAMOND "BRALE" PENETRATOR Diameter of Specimen — Inches						
	1/4	3/8	1/2	5/8	3/4	7/8	1
80	0.5	0.5	0.5	0	0	0	0
70	1.0	1.0	0.5	0.5	0.5	0	0
60	1.5	1.0	1.0	0.5	0.5	0.5	0.5
50	2.5	2.0	1.5	1.0	1.0	0.5	0.5
40	3.5	2.5	2.0	1.5	1.0	1.0	1.0
30	5.0	3.5	2.5	2.0	1.5	1.5	1.0
20	6.0	4.5	3.5	2.5	2.0	1.5	1.5

Observed Dial Reading "B"/"F"/"G" Scale	1/16" BALL PENETRATOR Diameter of Specimen — Inches						
	1/4	3/8	1/2	5/8	3/4	7/8	1
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

Observed Dial Reading 15N/30N/45N Scale	DIAMOND "N" BRALE PENETRATOR Diameter of Specimen — Inches						
	1/8	1/4	3/8	1/2	5/8	3/4	1
90	0.5	0.5	0	0	0	0	0
85	0.5	0.5	0.5	0	0	0	0
80	1.0	0.5	0.5	0.5	0	0	0
75	1.5	1.0	0.5	0.5	0.5	0.5	0
70	2.0	1.0	1.0	0.5	0.5	0.5	0.5
65	2.5	1.5	1.0	0.5	0.5	0.5	0.5
60	3.0	1.5	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
50	3.5	2.0	1.5	1.0	1.0	1.0	0.5
45	4.0	2.5	2.0	1.0	1.0	1.0	1.0
40	4.5	3.0	2.0	1.5	1.0	1.0	1.0

Observed Dial Reading 15T/30T/45T Scale	1/16" BALL PENETRATOR Diameter of Specimen — Inches						
	1/8	1/4	3/8	1/2	5/8	3/4	1
90	1.5	1.0	1.0	0.5	0.5	0.5	0.5
80	3.0	2.0	1.5	1.5	1.0	1.0	0.5
70	5.0	3.5	2.5	2.0	1.5	1.0	1.0
60	6.5	4.5	3.0	2.5	2.0	1.5	1.5
50	8.5	5.5	4.0	3.0	2.5	2.0	1.5
40	10.0	6.5	4.5	3.5	3.0	2.5	2.0
30	11.5	7.5	5.0	4.0	3.5	2.5	2.0
20	13.0	9.0	6.0	4.5	3.5	3.0	2.0

These CORRECTIONS are APPROXIMATE ONLY and represent the averages, to the nearest 1/2 "ROCKWELL" number, of numerous actual observations by different investigators, and also mathematical analyses of the same problem.

When testing cylindrical work, the accuracy of the test will be seriously affected by alignment of elevating screw, Vee anvil, penetrators, surface finish and the straightness of the cylinder.