



TABLE 3-7
Typical Effective Case Depth Specifications for Carburized Gearing

Normal Diametral Pitch ¹	Normal Tooth Thickness ²	Range of Normal Diametral Pitch	Range of Normal Circular Pitch	Effective Case Depth (inches) to RC 50 ^{3, 4}	
				Spur, Helical Bevel & Mitre ⁶	Worms with Ground ⁷ Threads
16	0.098	17.5 – 13.7	0.180 – 0.230	0.010 – 0.020	0.020 – 0.030
14	0.112	17.5 – 13.7	0.180 – 2.300	0.010 – 0.020	0.020 – 0.030
12	0.131	13.7 – 10.5	0.230 – 0.300	0.015 – 0.025	0.025 – 0.040
10	0.157	10.5 – 8.5	0.300 – 0.370	0.020 – 0.030	0.035 – 0.050
8	0.198	8.5 – 7.5	0.370 – 0.480	0.025 – 0.040	0.040 – 0.055
7	0.224	7.5 – 6.5	0.370 – 0.480	0.025 – 0.040	0.040 – 0.055
6	0.251	6.5 – 5.2	0.480 – 0.600	0.030 – 0.050	0.045 – 0.060
5	0.314	5.2 – 4.3	0.600 – 0.728	0.040 – 0.060	0.045 – 0.060
4	0.393	4.3 – 3.7	0.728 – 0.860	0.050 – 0.070	0.045 – 0.060
3.5	0.449	3.7 – 3.1	0.860 – 1.028	0.060 – 0.080	0.060 – 0.075
3.0	0.523	3.1 – 2.8	1.026 – 1.200	0.070 – 0.090	0.075 – 0.090
2.75	0.571	2.8 – 2.6	1.026 – 1.200	0.070 – 0.090	0.075 – 0.090
2.5	0.628	2.6 – 2.3	1.200 – 1.400	0.080 – 0.105	0.075 – 0.090
2.25	0.698	2.3 – 2.2	1.200 – 1.400	0.080 – 0.105	0.075 – 0.090
2.0	0.785	2.2 – 1.9	1.428 – 1.676	0.090 – 0.125	0.075 – 0.090
1.75	0.897	1.9 – 1.6	1.676 – 1.976	0.105 – 0.140	0.075 – 0.090
1.5	1.047	1.6 – 1.3	1.976 – 2.400	0.120 – 0.155	0.075 – 0.090
1.25	1.256	1.3 – 1.1	2.400 – 2.828	0.145 – 0.180	0.075 – 0.090
1.0	1.570	1.1 & less	2.828 & more	0.170 – 0.205	0.075 – 0.090
0.75	2.094	1.1 & less	2.325 & more	0.170 – 0.205	0.075 – 0.090