

TABLE 3. STANDARD CLEARANCES FOR NORMAL APPLICATION OF ROUND TOOLING^{1,2}

NOMINAL TOOL SIZE	UPPER PUNCH			ACTUAL PUNCH TIP DIAMETER ³		LOWER PUNCH		
	STANDARD CLEARANCE	MINIMUM CLEARANCE	MAXIMUM CLEARANCE ⁴	UPPER	LOWER	STANDARD CLEARANCE	MINIMUM CLEARANCE	MAXIMUM CLEARANCE ⁴
1/8 [3.175]	0.0015 [0.038]	0.0015 [0.038]	0.0025 [0.064]	0.1235 [3.137]	0.1240 [3.150]	0.0010 [0.025]	0.0010 [0.025]	0.0020 [0.051]
5/32 [3.970]	0.0015 [0.038]	0.0015 [0.038]	0.0025 [0.064]	0.1548 [3.932]	0.1553 [3.945]	0.0010 [0.025]	0.0010 [0.025]	0.0020 [0.051]
3/16 [4.763]	0.0015 [0.038]	0.0015 [0.038]	0.0025 [0.064]	0.1860 [4.724]	0.1865 [4.737]	0.0010 [0.025]	0.0010 [0.025]	0.0020 [0.051]
7/32 [5.555]	0.0016 [0.041]	0.0016 [0.041]	0.0026 [0.066]	0.2171 [5.514]	0.2177 [5.530]	0.0010 [0.025]	0.0010 [0.025]	0.0020 [0.051]
1/4 [6.350]	0.0016 [0.041]	0.0016 [0.041]	0.0026 [0.066]	0.2484 [6.309]	0.2489 [6.322]	0.0011 [0.028]	0.0011 [0.028]	0.0021 [0.053]
9/32 [7.142]	0.0017 [0.043]	0.0017 [0.043]	0.0027 [0.069]	0.2795 [7.099]	0.2801 [7.115]	0.0011 [0.028]	0.0011 [0.028]	0.0021 [0.053]
5/16 [7.938]	0.0017 [0.043]	0.0017 [0.043]	0.0027 [0.069]	0.3108 [7.894]	0.3114 [7.910]	0.0011 [0.028]	0.0011 [0.028]	0.0021 [0.053]
11/32 [8.730]	0.0018 [0.046]	0.0018 [0.046]	0.0028 [0.071]	0.3419 [8.684]	0.3425 [8.700]	0.0012 [0.031]	0.0012 [0.031]	0.0022 [0.056]
3/8 [9.525]	0.0018 [0.046]	0.0018 [0.046]	0.0028 [0.071]	0.3732 [9.479]	0.3738 [9.495]	0.0012 [0.031]	0.0012 [0.031]	0.0022 [0.056]
13/32 [10.318]	0.0019 [0.048]	0.0019 [0.048]	0.0029 [0.074]	0.4043 [10.269]	0.4050 [10.287]	0.0012 [0.031]	0.0012 [0.031]	0.0022 [0.056]
7/16 [11.113]	0.0019 [0.048]	0.0019 [0.048]	0.0029 [0.074]	0.4356 [11.064]	0.4362 [11.080]	0.0013 [0.033]	0.0013 [0.033]	0.0023 [0.058]
15/32 [11.905]	0.0020 [0.051]	0.0020 [0.051]	0.0030 [0.076]	0.4667 [11.854]	0.4674 [11.872]	0.0013 [0.033]	0.0013 [0.033]	0.0023 [0.058]
1/2 [12.700]	0.0020 [0.051]	0.0020 [0.051]	0.0030 [0.076]	0.4980 [12.649]	0.4987 [12.667]	0.0013 [0.033]	0.0013 [0.033]	0.0023 [0.058]
17/32 [13.493]	0.0021 [0.053]	0.0021 [0.053]	0.0031 [0.079]	0.5291 [13.439]	0.5298 [13.457]	0.0014 [0.036]	0.0014 [0.036]	0.0024 [0.061]
9/16 [14.288]	0.0022 [0.056]	0.0022 [0.056]	0.0032 [0.081]	0.5603 [14.232]	0.5611 [14.252]	0.0014 [0.036]	0.0014 [0.036]	0.0024 [0.061]

NOTES:

1. DIMENSIONS ARE GIVEN FIRST IN INCHES, FOLLOWED BY THE EQUIVALENT MILLIMETERS IN BRACKETS.
2. BECAUSE OF METRIC CONVERSIONS, A DISCREPANCY OF 0.00004 [0.001] OCCURS FOR SOME DIMENSIONS.
3. THE TOLERANCE FOR ROUND PUNCH TIPS IS +.0000, -.0005 [+ .000, -.013].
4. MAXIMUM CLEARANCE OCCURS AT MAXIMUM DIE SIZE AND MINIMUM PUNCH TIP DIAMETER.