

Standard Tolerances and Specifications contd.

Margin Widths

Diameter Range (mm)	Regular	Non-Ferrous	Multi-Margin	Reamer
2.5 - 7.2	0.55	0.45	0.50	0.20
7.2 - 8.0	0.70	0.55	0.65	0.23
8.0 - 9.5	0.85	0.65	0.75	0.25
9.5 - 11.0	1.10	0.75	0.90	0.28
11.0 - 12.5	1.25	0.85	1.00	0.30
12.5 - 14.5	1.40	0.95	1.15	0.33
14.5 - 17.5	1.50	1.05	1.25	0.35
17.5 - 20.5	1.70	1.20	1.40	0.38
20.5 - 23.8	1.85	1.25	1.50	0.40
23.8 - 25.4	2.00	1.35	1.65	0.43
25.4 - 28.6	2.15	1.50	1.65	0.45
28.6 - 31.8	2.30	1.60	1.75	0.48
31.8 - 35.0	2.50	1.70	1.75	0.50
35.0 - 38.0	2.60	1.80	1.90	0.53
38.0 - 41.3	2.75	1.90	2.00	0.55
41.3 - 44.5	3.00	2.00	2.15	0.58
44.5 - 47.6	3.10	2.10	2.30	0.60
47.6 - 51.0	3.20	2.20	2.40	0.63
51.0 - 54.0	3.40	2.30	2.55	0.65
54.0 - 57.2	3.50	2.40	2.65	0.68
57.2 - 63.5	3.65	2.50	2.80	0.70
63.5 - 70.0	3.80	2.60	2.90	0.73
70.0 - 76.2	4.00	2.70	3.00	0.75

All tools specified to cut non-ferrous material with the exception of reamers and end mills, will have non-ferrous margins.

Concentricity

Methods of measurement

Place large diameter of the tool in a V-block or a close fitting bushing against a back stop. Using a comparator, goniometer, or indicator, rotate the drill indicating the concentricity of the shank or small(er) diameter(s).

Range

Range	T.I.V.	
	**Drills	Reamers
Tools of standard *taper length and shorter	0.05	0.013
Tools longer than standard *taper length but not longer than YT length	0.08	0.025
Tools longer than YT length	0.13	0.025

Taper length of 2-flute drill is used as the guide regardless of type construction. Includes core drills, counterbores, spotfacer, end mills, etc.