

Standard Tolerances and Specifications contd.

Spiral Angles

DRILL TOOLS

Diameter Range (mm)	Normal	Slow	Fast	Fast Subland
2.4 - 3.3	24°	15°	32°	29°
3.3 - 4.2	25°	16°	33°	30°
4.2 - 5.3	26°	17°	34°	31°
5.3 - 6.5	27°	18°	35°	32°
6.5 - 7.5	28°	19°	36°	33°
7.5 - 9.8	29°	20°	37°	34°
9.8 - 12.7	30°	21°	38°	35°
12.7 - 16.7	31°	22°	39°	36°
16.7 and over	32°	23°	40°	37°

REAMER TOOLS

Diameter Range (mm)	Spiral
2.4 - 4.4	9°
4.4 - 7.5	10°
7.5 - 10.3	11°
10.3 - 12.7	12°
12.7 - 15.5	13°
15.5 - 19.1	14°
19.1 - 22.6	15°
22.6 - 26.2	16°
26.2 - 30.5	17°
30.5 - and over	18°

Drill and reamer spirals can range for 0° to 50°.

Spirals other than Mohawk standard are available on request.

Overall and Flute Length Tolerance

DRILL TOOLS

Diameter Range (mm)	Tolerance
2.5 - 12.7	+3.0 -3.0
over 12.7 - 25.4	+6.0 -3.0
over 25.4 - 50.8	+6.0 -6.0
over 50.8 - 100	+10.0 -10.0

REAMER TOOLS

Diameter Range (mm)	Tolerance
2.5 - 25.4	+1.5 -1.5
over 25.4 - 50.8	+2.5 -2.5
over 50.8 - 100	+3.0 -3.0

Cutting Edge Relief Angles

Two flute drills, step drills and subland drills (drill points and step angles)

Diameter Range (mm)	Clearance (±1.5°)	Diameter range (mm)	Clearance (±1.5°)
2.5 - 3.0	18°	11.5 - 19.0	11°
3.0 - 4.5	17°	19.0 - 21.0	10°
4.5 - 6.0	16°	21.0 - 24.5	9°
6.0 - 7.5	15°	24.5 - 28.5	8°
7.5 - 9.0	14°	28.5 - 57.0	7°
9.0 - 10.0	13°	57.0 - 89.0	6°

Tools having more than two flutes (reamers, core drills, counterbores, etc.)

All cutting edges to have 7° to 10° clearance.