

Wood Cutting Tool Normal Operating Standards

Rim Speed (V): in ft./sec.

Materials	TCT Cutters	TCT Saw Blades
Softwood — along grain	190–250	230–310
Softwood — across grain	160–260	230–290
Hardwoods	180–240	220–280
Chipboards	200–260	220–280
Laminated boards	180–240	200–260
Plastic materials	140–200	160–240
Light metals	80–140	160–200

Tooth/Knife Progression (Sz):

Circular (TCT) Saw Blades:

Softwood — along grain	0.008 > 0.035"
Softwood — across grain	0.004 > 0.008"
Hardwoods	0.003 > 0.006"
Chipboards	0.004 > 0.010"
Laminated boards	0.002 > 0.006"
Plastic materials	0.003 > 0.008"
Light metals	0.001 > 0.004"

Shaper/Moulder/Tenoner (TCT) Cutters:

Fine Chip	0.010 > 0.025"
Medium Chip	0.025 > 0.065"
Coarse Chip	0.065 > 0.130"

Router Tool Operating Standards:

RPM (N) ranges from 14,000 to 24,000

Tool diameters range from 1/8" to 3"

Tooth/Knife Progress varies by tool diameter;

1/8" to 3/8"	0.0015" to 0.003"
3/8" to 3/4"	0.003" to 0.007"
3/4" to 1-1/4"	0.008" to 0.012"
1-1/4" to 2"	0.012" to 0.016"
Over 2"	0.016" to 0.020"

Drill and Boring Bits

RPM—Ranges:

Large diameter drills	500 > 1500
Medium diameter drills	1500 > 2500
Small diameter drills	2500 > 8000

Feed Rates—progress per revolution:

Large diameter drills	0.008" > 0.015"
Small diameter drills	0.001" > 0.007"

Courtesy of Leitz Tooling Systems Inc.



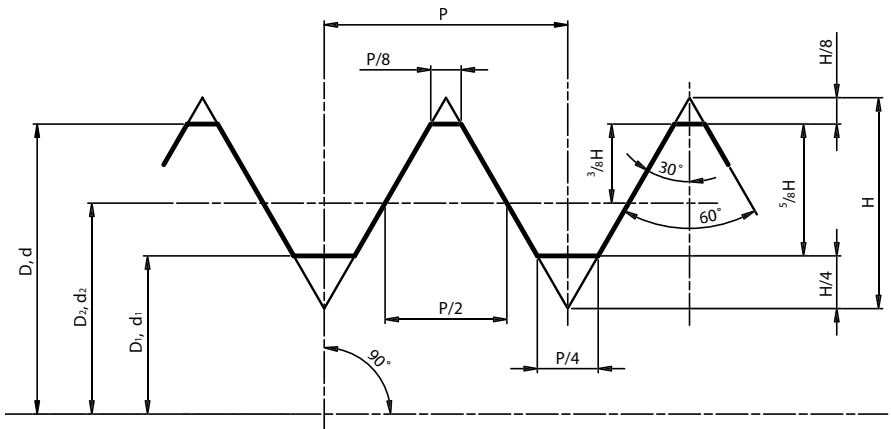
Decimal Equivalents

(Letter Size Drills)

Letter	Size of Drill in Inches	Letter	Size of Drill in Inches
A	.234	N	.302
B	.238	O	.316
C	.242	P	.323
D	.246	Q	.332
E	.250	R	.339
F	.257	S	.348
G	.261	T	.358
H	.266	U	.368
I	.272	V	.377
J	.277	W	.386
K	.281	X	.397
L	.290	Y	.404
M	.295	Z	.413

ISO General Purpose Metric Screw Thread

BASIC PROFILE



P = pitch
 D = major diameter of internal thread
 d = major diameter of external thread
 $D1$ = minor diameter of internal thread

$d1$ = minor diameter of external thread
 $D2$ = pitch diameter of internal thread
 $d2$ = pitch diameter of external thread
 H = height of fundamental triangle