

Speeds and Feeds



Material	RPM	Feed (mm/min)	Cutting Depth (mm)	Material	RPM	Feed (mm/min)	Cutting Depth (mm)
03-3357	18000 - 22000	4000 - 6000	1.5 - 3	03-3375	18000 - 22000	4000 - 6000	2 - 4
03-3358	18000 - 22000	5000 - 7000	2 - 4	03-3376	16000 - 20000	5000 - 7000	3 - 6
03-3359	16000 - 20000	6000 - 8000	3 - 6	03-3377	14000 - 18000	6000 - 8000	4 - 8
03-3360	14000 - 18000	7000 - 9000	4 - 8	03-3378	12000 - 16000	7000 - 9000	5 - 10
03-3361	12000 - 16000	8000 - 10000	5 - 10	03-3379	12000 - 15000	8000 - 10000	6 - 12
03-3362	18000 - 22000	3500 - 5000	1.5 - 3	03-3380	18000 - 22000	4000 - 6000	1.5 - 3
03-3363	18000 - 22000	4000 - 6000	2 - 4	03-3381	18000 - 22000	5000 - 7000	2 - 4
03-3364	16000 - 20000	5000 - 7000	3 - 6	03-3382	16000 - 20000	6000 - 8000	3 - 6
03-3365	14000 - 18000	6000 - 8000	4 - 8	03-3383	14000 - 18000	7000 - 9000	4 - 8
03-3366	12000 - 16000	7000 - 9000	5 - 10	03-3384	12000 - 16000	8000 - 10000	5 - 10
03-3367	12000 - 15000	8000 - 10000	6 - 12	03-3385	12000 - 15000	9000 - 11000	6 - 12
03-3368	18000 - 22000	4000 - 6000	1.5 - 3	03-3386	18000 - 22000	3500 - 5000	1.5 - 3
03-3369	18000 - 22000	5000 - 7000	2 - 4	03-3387	18000 - 22000	4000 - 6000	2 - 4
03-3370	16000 - 20000	6000 - 8000	3 - 6	03-3388	16000 - 20000	5000 - 7000	3 - 6
03-3371	14000 - 18000	7000 - 9000	4 - 8	03-3389	14000 - 18000	6000 - 8000	4 - 8
03-3372	12000 - 16000	8000 - 10000	5 - 10	03-3390	12000 - 16000	7000 - 9000	5 - 10
03-3373	12000 - 15000	9000 - 11000	6 - 12	03-3391	12000 - 15000	8000 - 10000	6 - 12
03-3374	18000 - 22000	3500 - 5000	1.5 - 3				

Recommended Cutting Parameters for Wood



Speeds and Feeds



Feed Rate, Per Revolution (in/min)
$v_f = f_n \cdot n$

Feed Rate, Per Tooth (in/min)
$v_f = f_z \cdot n \cdot Z$

Feed Per Revolution (in/rev)
$f_n = \frac{v_f}{n}$

Feed Per Tooth (in)
$f_z = \frac{v_f}{n \cdot Z}$

Cutting Speed (ft/min)
$v_c = \frac{\pi \cdot D_{tool} \cdot n}{12}$

Spindle Speed (rev/min)
$n = \frac{v_c \cdot 12}{\pi \cdot D_{tool}}$

Material Removal Rate (in ³ /min)
$MMR = a_p \cdot a_e \cdot v_f$

Inch

Symbol	Definition	Unit
V_f	Feed rate	in/min
f_n	Feed per revolution	in/rev
f_z	Feed per tooth	in
V_c	Cutting speed	ft/min (SFM)
n	Spindle speed	rev/min (RPM)
D_{tool}	Tool cutting diameter	in
MMR	Material removal rate	(in ³ /min)
a_e	Radial depth of cut	in
a_p	Axial depth of cut	in
Z	Number of teeth/flutes	