

1 Flute V-Tip RPM & Feed Rate Chart



30° V-Tips
7 Sizes Available



60° V-Tips
7 Sizes Available



90° V-Tips
4 Sizes Available

For Cutting

- Acrylic Stone
- Aluminum, Brass & Copper
- Carbon Fiber
- Corian
- Hard Wood
- HDPE
- King Starboard®/ Marine Building Material
- Laminated Materials
- MDF
- PCB Board
- Phenolic
- Plastics & Plexiglas®
- Poly (Methyl Methacrylate) (PMMA)
- Soft Wood
- Solid Surface
- Veneers

inch/min	Feed variations RPM (inch/min)						
cutting diameter (Inch)	0.005	0.010	0.020	0.030	0.040	0.060	0.090
rotation speed (RPM)							
6000	19	47	94	142	NO LIMIT		
7000	22	55	110				
8000	25	63	126				
9000	28	71	142				
10000	31	79	157				
11000	35	87					
12000	38	94					
13000	41	102					
14000	44	110					
15000	47	118					
16000	50	126					
17000	54	134					
18000	57	142					
19000	60	150					
20000	63						
21000	66						
22000	69						
23000	72						
24000	76						
25000	79						
26000	82						
27000	85						
28000	88						

mm/min	Feed variations RPM (mm/min)						
cutting diameter (mm)	0.1	0.25	0.5	0.75	1	1.5	2.25
rotation speed (RPM)							
6000	480	1200	2400	3600	NO LIMIT		
7000	560	1400	2800				
8000	640	1600	3200				
9000	720	1800	3600				
10000	800	2000	4000				
11000	880	2200					
12000	960	2400					
13000	1040	2600					
14000	1120	2800					
15000	1200	3000					
16000	1280	3200					
17000	1360	3400					
18000	1440	3600					
19000	1520	3800					
20000	1600						
21000	1680						
22000	1760						
23000	1840						
24000	1920						
25000	2000						
26000	2080						
27000	2160						
28000	2240						

Simple Machining Calculations:

- To find **RPM**: (SFM x 3.82) / diameter of tool
- To find **SFM**: 0.262 x diameter of tool x RPM
- To find **Feed Rate**: RPM x # of flutes x chip load
- To find **Chip Load**: IPM / (RPM x # of Flutes)

Depth of Cut:

- 1 x D Use recommended chip load
- 2 x D Reduce chip load by 25%
- 3 x D Reduce chip load by 50%