



**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

<b>inch/min</b>		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			
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						

<b>mm/min</b>		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			
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 feed rate

2 x D Reduce feed rate by 25%

3 x D Reduce feed rate by 50%