

**Solid Carbide Compression Spiral  
Single, 2 & 3 Flute Router Bits**  
Operating RPM: 18,000

**(Chip Load Per Tooth)**

Diameter	MDF/HDF	Laminate	Melamine	Veneered Plywood	Wood	Oriented Strand Board (OSB)
<b>1 Flute</b>						
1/8" (0.125)	0.010" - 0.012"	0.013" - 0.015"	0.013" - 0.015"	0.013" - 0.015"	0.010" - 0.012"	0.013" - 0.015"
1/4" (0.25)	0.013" - 0.015"	0.014" - 0.016"	0.014" - 0.016"	0.014" - 0.016"	0.014" - 0.016"	0.014" - 0.016"
1/2" (0.50)	0.016" - 0.018"	0.018" - 0.020"	0.018" - 0.020"	0.018" - 0.020"	0.018" - 0.020"	0.018" - 0.020"
<b>2 Flute</b>						
1/8" (0.125)	0.006" - 0.010"	0.012" - 0.014"	0.012" - 0.014"	0.012" - 0.014"	0.008" - 0.010"	0.012" - 0.014"
5/32" (0.15625)	0.006" - 0.010"	0.012" - 0.014"	0.012" - 0.014"	0.012" - 0.014"	0.008" - 0.010"	0.012" - 0.014"
3/16" (0.1875)	0.010" - 0.012"	0.016" - 0.018"	0.016" - 0.018"	0.016" - 0.018"	0.012" - 0.014"	0.016" - 0.018"
1/4" (0.25)	0.013" - 0.015"	0.017" - 0.019"	0.017" - 0.019"	0.017" - 0.019"	0.014" - 0.016"	0.017" - 0.019"
3/8" (0.375)	0.014" - 0.016"	0.019" - 0.021"	0.019" - 0.021"	0.019" - 0.021"	0.016" - 0.018"	0.019" - 0.021"
1/2" (0.50)	0.016" - 0.018"	0.021" - 0.023"	0.021" - 0.023"	0.021" - 0.023"	0.018" - 0.020"	0.021" - 0.023"
<b>3 Flute</b>						
3/8" (0.375)	0.014" - 0.016"	0.019" - 0.021"	0.019" - 0.021"	0.019" - 0.021"	0.014" - 0.016"	0.019" - 0.021"
1/2" (0.50)	0.016" - 0.018"	0.022" - 0.024"	0.022" - 0.024"	0.022" - 0.024"	0.016" - 0.018"	0.022" - 0.024"

Tool Reference #'s	Dia.
1 Flute	
46137	1/8"
46139	1/8"
46140	1/4"
46159	1/2"
46160	1/2"
2 Flute	
46170	1/4"
46170-LH	1/4"
46171	3/8"
46172	3/8"
46173	3/8"
46174	3/8"
46178	3/8"
46180	1/8"
46181	3/16"
46182	1/2"
46183	5/32"
46186	1/2"
46188	1/2"
46188-LH	1/2"
46189	1/2"
46190	1/2"
46190-LH	1/2"
46191	1/2"
3 Flute	
46010	3/8"
46011	3/8"
46012	1/2"
46013	1/2"
46014	1/2"

**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 IPM**: RPM x # of flutes x chip load

To find **Chip Load**: Feed Rate 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%