

Speeds and Feeds for **1010** style end mills. Solid carbide 4 flute fine pitch rougher with TIALN coating. End Mills are made in the USA.

Hardness				Fee	d Per	Tooth	
Bhn	SFM	1/8"dia	1⁄4"	3/8"	1⁄2"	3⁄4"	1"
*	*	.*					
80-150	550	.0006	.0015	.0022	.004	.005	.0055
125-175	500	.0006	.0014	.002	.003	.004	.0045
200-280	400	.0005	.0012	.0018	.0025	.0035	.004
300-400	240	.0004	.001	.0016	.0022	.0032	.0035
120-175	500	.0005	.0014	.002	.0035	.005	.0052
160-200	375	.0005	.0014	.002	.0035	.005	.0052
180-260	200	.0004	.0013	.0018	.0032	.0045	.0046
160-200	230	.0005	.0015	.002	.0035	.005	.0052
320-380	300	.0005	.001	.0016	.0022	.0035	.004
280-320	60	.0002	.0006	.0014	.0018	.0028	.0032
120-160	400	.0006	.0015	.0022	.004	.005	.0055
*	*	*					
	Bhn   *   80-150   125-175   200-280   300-400   120-175   160-200   180-260   160-200   320-380   280-320   120-160	Bhn   SFM     *   *     80-150   550     125-175   500     200-280   400     300-400   240     120-175   500     120-175   500     160-200   375     180-260   200     320-380   300     280-320   60     120-160   400	Bhn   SFM   1/8"dia     *   *   .*     80-150   550   .0006     125-175   500   .0006     200-280   400   .0005     300-400   240   .0004     120-175   500   .0005     160-200   375   .0005     180-260   200   .0004     160-200   375   .0005     320-380   300   .0005     280-320   60   .0002     120-160   400   .0006	Bhn   SFM   1/8"dia   1/4"     *   .*   .*   .*     80-150   550   .0006   .0015     125-175   500   .0006   .0014     200-280   400   .0005   .0012     300-400   240   .0004   .001     120-175   500   .0005   .0014     160-200   375   .0005   .0014     180-260   200   .0004   .0013     160-200   375   .0005   .0014     180-260   200   .0005   .0015     320-380   300   .0005   .0015     280-320   60   .0002   .0006     120-160   400   .0006   .0015	Bhn   SFM   1/8"dia   1/4"   3/8"     *   *   .*   .*   .   .     80-150   550   .0006   .0015   .0022     125-175   500   .0006   .0014   .002     200-280   400   .0005   .0012   .0018     300-400   240   .0004   .001   .0016     120-175   500   .0005   .0014   .002     160-200   375   .0005   .0014   .002     180-260   200   .0004   .0013   .0018     160-200   375   .0005   .0014   .002     320-380   300   .0005   .0015   .0016     320-380   300   .0005   .0015   .0014     280-320   60   .0002   .0006   .0014     120-160   400   .0006   .0015   .0022	Bhn   SFM   1/8"dia   1/4"   3/8"   1/2"     *   *   .*   .*   Image: Constraint of the state of the	Bhn   SFM   1/8"dia   1/4"   3/8"   1/2"   3/4"     *   *   .*   .*   Image: Section of the section o

\* please use our 3 flute rougher with high helix series 1011

Feed Per Tooth is based on.....

slotting depth of 1.0 x Cutting Diameter, for deeper slotting reduce feed and speed profiling with Axial depth up to 2x Cutting Diameter and Radial Depth of .25 x Cutting Diameter, when profiling less than .25 cutting diameter increase feed and speed

When using long flute length roughers reduce SFM and Feed Per Tooth accordingly. Normally SFM only 10-20%, but Feed Per Tooth should be reduced 30-60%.

## 6 guidelines for best cutting results

keep overall gage length short	keep tool concentricity low	climb milling is generally best
workpiece rigidity is important	avoid double cutting chips	avoid thermal shock

**Note**: Cutting speeds, feeds, and lubrication data are given as starting values only. Parameters should be varied to suite your particular conditions. MariTool is constantly improving products, tolerances, and reliability. As such, these speeds and feeds are subject to change without prior notice. Cutting tools may shatter and or produce dangerous fumes when being used. Appropriate protection is advised. Rev. A