

Finish Rates Of Feed

Information below should be used as a guideline - results may vary

The finish of your material is dependent on the feed and speed of your machine. No matter how good the quality of your cutting tool is, if you have the incorrect speed and feed then your cutting tool will fail. Signs of incorrect feed and speed rates include burning and high heat (causing the knives to dull quickly).

$(\text{R.P.M.} \times \text{No. Knives}) / (\text{Ft. Per. Min.} \times 12) = \text{Knife Marks Per Inch}$

R.P.M.	Knife Marks Per Inch	Number of Knives Cutting								
		1	2	4	6	8	10	12	14	16
3,600	10	30 Ft./Min	60 Ft./Min	120 Ft./Min	180 Ft./Min	240 Ft./Min	300 Ft./Min	360 Ft./Min	420 Ft./Min	480 Ft./Min
	12	25	50	100	150	200	250	300	350	400
	14	21	42	85	128	171	214	257	300	342
	16	18	37	75	112	150	187	225	262	300
	18	16	33	66	100	133	166	200	233	266
	20	15	30	60	90	120	150	180	210	240
4,800	10	40 Ft./Min	80 Ft./Min	160 Ft./Min	240 Ft./Min	320 Ft./Min	400 Ft./Min	480 Ft./Min	560 Ft./Min	640 Ft./Min
	12	33	66	133	200	266	333	400	466	533
	14	28	57	114	171	228	285	342	400	457
	16	25	50	100	150	200	250	300	350	400
	18	22	44	88	133	177	222	266	311	355
	20	20	40	80	120	160	200	240	290	320
6,000	10	50 Ft./Min	100 Ft./Min	200 Ft./Min	300 Ft./Min	400 Ft./Min	500 Ft./Min	600 Ft./Min	700 Ft./Min	800 Ft./Min
	12	41	83	166	250	333	416	500	583	666
	14	35	71	142	214	285	357	428	500	571
	16	31	62	125	187	254	312	375	457	500
	18	27	55	111	166	222	277	333	388	444
	20	25	50	100	150	200	250	300	350	400
7,200	10	60 Ft./Min	120 Ft./Min	240 Ft./Min	360 Ft./Min	480 Ft./Min	600 Ft./Min	720 Ft./Min	840 Ft./Min	960 Ft./Min
	12	50	100	200	300	400	500	600	700	800
	14	42	85	171	257	342	428	514	600	685
	16	37	75	150	225	300	375	450	525	600
	18	33	66	133	200	266	333	400	466	555
	20	30	60	120	180	240	300	360	420	480

8,000	10	66 Ft./Min	133 Ft./Min	266 Ft./Min	400 Ft./Min	533 Ft./Min	666 Ft./Min	800 Ft./Min	933 Ft./Min	1,066 Ft./Min
	12	55	111	222	333	444	555	666	777	888
	14	47	95	190	285	380	476	571	666	761
	16	41	83	166	250	333	416	500	583	666
	18	37	74	148	222	296	370	444	518	592
	20	33	66	133	200	266	333	400	466	533
10,000	10	83 Ft./Min	166 Ft./Min	333 Ft./Min	500 Ft./Min	666 Ft./Min	833 Ft./Min	1,000 Ft./Min	1,166 Ft./Min	1,333 Ft./Min
	12	69	138	277	416	555	694	833	972	1,111
	14	59	119	238	357	476	595	714	833	952
	16	52	104	204	312	416	520	625	729	833
	18	46	92	185	277	370	462	555	648	740
	20	41	83	166	250	333	416	500	583	666