

■ Recommended Starting Speeds [SFM]

Material Group		KC422M			KC510M			KCK15			KC520M			KCPM20		
P	1	—	—	—	—	—	—	—	—	—	—	—	—	2170	<b>1910</b>	1760
	2	—	—	—	—	—	—	—	—	—	—	—	—	1340	<b>1210</b>	1090
	3	—	—	—	—	—	—	—	—	—	—	—	—	1210	<b>1090</b>	1000
	4	—	—	—	960	<b>780</b>	660	—	—	—	—	—	—	910	<b>840</b>	760
	5	—	—	—	—	—	—	—	—	—	—	—	—	1090	<b>980</b>	900
	6	—	—	—	—	—	—	—	—	—	—	—	—	760	<b>660</b>	570
M	1	—	—	—	—	—	—	—	—	—	—	—	—	880	<b>790</b>	680
	2	—	—	—	—	—	—	—	—	—	—	—	—	800	<b>700</b>	620
	3	—	—	—	—	—	—	—	—	—	—	—	—	640	<b>570</b>	490
K	1	—	—	—	1150	<b>1040</b>	940	1660	<b>1510</b>	1340	1060	<b>960</b>	850	1420	<b>1280</b>	1150
	2	—	—	—	910	<b>820</b>	760	1310	<b>1170</b>	1090	830	<b>740</b>	700	1130	<b>1010</b>	920
	3	—	—	—	770	<b>680</b>	620	1100	<b>980</b>	900	700	<b>620</b>	560	950	<b>840</b>	780
N	1	4220	<b>3720</b>	3440	2520	<b>2240</b>	2060	—	—	—	—	—	—	—	—	—
	2	3720	<b>3440</b>	3000	2280	<b>2100</b>	1920	—	—	—	—	—	—	—	—	—
S	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
H	1	—	—	—	630	<b>510</b>	360	—	—	—	—	—	—	550	<b>460</b>	370
	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Indexable Milling

Material Group		KC522M			KC725M			KCMP30			KCPK30		
P	1	1300	<b>1130</b>	1060	1030	<b>900</b>	840	1780	<b>1560</b>	1450	1780	<b>1560</b>	1450
	2	1080	<b>950</b>	790	860	<b>760</b>	640	1100	<b>1000</b>	900	1100	<b>1000</b>	900
	3	1000	<b>840</b>	700	790	<b>670</b>	550	1000	<b>900</b>	820	1000	<b>900</b>	820
	4	890	<b>730</b>	590	710	<b>590</b>	470	740	<b>690</b>	620	740	<b>690</b>	620
	5	730	<b>660</b>	590	590	<b>530</b>	470	1020	<b>910</b>	830	1020	<b>910</b>	830
	6	650	<b>490</b>	400	520	<b>400</b>	310	620	<b>540</b>	—	620	<b>540</b>	—
M	1	800	<b>710</b>	650	670	<b>590</b>	540	820	<b>720</b>	620	820	<b>720</b>	620
	2	730	<b>620</b>	520	610	<b>520</b>	430	730	<b>640</b>	550	730	<b>640</b>	550
	3	550	<b>480</b>	370	460	<b>400</b>	310	570	<b>520</b>	460	570	<b>520</b>	460
K	1	900	<b>820</b>	720	—	—	—	—	—	—	1160	<b>1050</b>	940
	2	710	<b>640</b>	590	—	—	—	—	—	—	920	<b>830</b>	760
	3	590	<b>530</b>	480	—	—	—	—	—	—	770	<b>690</b>	640
N	1	—	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—	—
S	1	160	<b>140</b>	110	140	<b>120</b>	100	140	<b>120</b>	100	—	—	—
	2	160	<b>140</b>	110	140	<b>120</b>	100	140	<b>120</b>	100	—	—	—
	3	200	<b>160</b>	110	180	<b>140</b>	100	180	<b>140</b>	100	—	—	—
	4	280	<b>200</b>	140	240	<b>180</b>	120	240	<b>180</b>	120	—	—	—
H	1	470	<b>360</b>	280	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—	—

NOTE: FIRST choice starting speeds are in **bold** type.  
As the average chip thickness value increases, the speed should be decreased.

■ Recommended Starting Feeds [IPT]

Light Machining	General Purpose	Heavy Machining
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At .197 Axial Depth of Cut (ap)

Insert Geometry	Programmed feed per tooth (fz) as a % of radial depth of cut (ae) of working diameter (dw)														Insert Geometry	
	10%			20%			30%			40%			50–100%			
.F..LDJ	.004	.011	.011	.003	.008	.008	.002	.007	.007	.002	.007	.007	.002	.007	.006	.F..LDJ
.E..LDJ	.004	.011	.015	.003	.008	.011	.002	.007	.010	.002	.007	.009	.002	.007	.009	.E..LDJ
.E..LD	.004	.011	.023	.003	.008	.017	.002	.007	.015	.002	.007	.014	.002	.007	.014	.E..LD
.S..GDJ	.008	.017	.026	.006	.012	.019	.005	.011	.017	.005	.010	.016	.005	.010	.015	.S..GDJ
.S..GD	.008	.017	.026	.006	.012	.019	.005	.011	.017	.005	.010	.016	.005	.010	.015	.S..GD
.S..HD	.013	.017	.028	.010	.012	.021	.009	.011	.018	.008	.010	.017	.008	.010	.017	.S..HD

At .098 Axial Depth of Cut (ap)

Insert Geometry	Programmed feed per tooth (fz) as a % of radial depth of cut (ae) of working diameter (dw)														Insert Geometry	
	10%			20%			30%			40%			50–100%			
.F..LDJ	.004	.013	.012	.003	.010	.009	.003	.009	.008	.003	.008	.008	.002	.008	.007	.F..LDJ
.E..LDJ	.004	.013	.018	.003	.010	.013	.003	.009	.011	.003	.008	.011	.002	.008	.010	.E..LDJ
.E..LD	.004	.013	.027	.003	.010	.020	.003	.009	.017	.003	.008	.016	.002	.008	.016	.E..LD
.S..GDJ	.009	.019	.030	.007	.014	.022	.006	.012	.019	.006	.012	.018	.006	.011	.018	.S..GDJ
.S..GD	.009	.019	.030	.007	.014	.022	.006	.012	.019	.006	.012	.018	.006	.011	.018	.S..GD
.S..HD	.015	.019	.033	.011	.014	.024	.010	.012	.021	.009	.012	.020	.009	.011	.019	.S..HD

At .049 Axial Depth of Cut (ap)

Insert Geometry	Programmed feed per tooth (fz) as a % of radial depth of cut (ae) of working diameter (dw)														Insert Geometry	
	10%			20%			30%			40%			50–100%			
.F..LDJ	.005	.017	.016	.004	.013	.012	.004	.011	.011	.003	.010	.010	.003	.010	.010	.F..LDJ
.E..LDJ	.005	.017	.023	.004	.013	.017	.004	.011	.015	.003	.010	.014	.003	.010	.014	.E..LDJ
.E..LD	.005	.017	.035	.004	.013	.026	.004	.011	.022	.003	.010	.021	.003	.010	.020	.E..LD
.S..GDJ	.012	.026	.040	.009	.019	.029	.008	.016	.025	.007	.015	.024	.007	.015	.023	.S..GDJ
.S..GD	.012	.026	.040	.009	.019	.029	.008	.016	.025	.007	.015	.024	.007	.015	.023	.S..GD
.S..HD	.020	.026	.044	.015	.019	.032	.013	.016	.027	.012	.015	.026	.012	.015	.025	.S..HD

At .025 Axial Depth of Cut (ap)

Insert Geometry	Programmed feed per tooth (fz) as a % of radial depth of cut (ae) of working diameter (dw)														Insert Geometry	
	10%			20%			30%			40%			50–100%			
.F..LDJ	.007	.024	.023	.005	.018	.017	.005	.015	.014	.004	.014	.013	.004	.014	.013	.F..LDJ
.E..LDJ	.007	.024	.032	.005	.018	.023	.005	.015	.020	.004	.014	.019	.004	.014	.019	.E..LDJ
.E..LD	.007	.024	.049	.005	.018	.035	.005	.015	.031	.004	.014	.028	.004	.014	.028	.E..LD
.S..GDJ	.017	.035	.056	.012	.026	.040	.011	.022	.035	.010	.021	.032	.010	.020	.032	.S..GDJ
.S..GD	.017	.035	.056	.012	.026	.040	.011	.022	.035	.010	.021	.032	.010	.020	.032	.S..GD
.S..HD	.028	.035	.061	.021	.026	.044	.018	.022	.038	.017	.021	.035	.016	.020	.034	.S..HD

NOTE: Use "Light Machining" values as starting feed rate.