

## ■ 3rd Step – Select the Cutting Speed

Low-Carbon (< 0,3% C) and Free-Machining Steel											Speed - m/min (sfm)		Starting Conditions ◊	
Material Group	grade	135 (450)	180 (600)	225 (800)	275 (900)	320 (1050)	360 (1200)	410 (1350)	455 (1500)	495 (1650)	m/min	sfm		
P1	KCP05										435	1450		
	KCP10										395	1320		
	KCP25										275	925		
	KCP30										210	700		
	KCP40										210	700		
Medium- and High-Carbon Steels (> 0,3% C)											Speed - m/min (sfm)		Starting Conditions ◊	
Material Group	grade	135 (450)	180 (600)	225 (800)	275 (900)	320 (1050)	360 (1200)	410 (1350)	455 (1500)	495 (1650)	m/min	sfm		
P2	KCP05										240	800		
	KCP10										265	880		
	KCP25										195	650		
	KCP30										150	500		
	KCP40										150	500		
Alloy Steels and Tool Steels (≤ 330 HB) (≤ 35 HRC)											Speed - m/min (sfm)		Starting Conditions ◊	
Material Group	grade	135 (450)	180 (600)	225 (800)	275 (900)	320 (1050)	360 (1200)	410 (1350)	455 (1500)	495 (1650)	m/min	sfm		
P3	KCP05										205	680		
	KCP10										190	630		
	KCP25										155	510		
	KCP30										120	400		
	KCP40										120	400		
Alloy Steels and Tool Steels (340–450 HB) (36–48 HRC)											Speed - m/min (sfm)		Starting Conditions ◊	
Material Group	grade	60 (200)	90 (300)	120 (400)	150 (500)	180 (600)	210 (700)	240 (800)	270 (900)	300 (1000)	m/min	sfm		
P4	KCP05										160	530		
	KCP10										145	480		
	KCP25										105	360		
	KCP30										95	325		
	KCP40										95	325		
Ferritic, Martensitic, and PH Stainless Steels (≤ 330 HB) (≤ 35 HRC)											Speed - m/min (sfm)		Starting Conditions ◊	
Material Group	grade	120 (400)	150 (500)	180 (600)	210 (700)	240 (800)	270 (900)	300 (1000)	330 (1100)	360 (1200)	m/min	sfm		
P5	KCP05										240	800		
	KCP10										215	720		
	KCP25										195	650		
	KCP30										135	450		
	KCP40										135	500		
Ferritic, Martensitic, and PH Stainless Steels (340–450 HB) (36–48 HRC)											Speed - m/min (sfm)		Starting Conditions ◊	
Material Group	grade	105 (350)	135 (450)	165 (550)	195 (650)	225 (750)	255 (850)	285 (950)	315 (1050)	345 (1150)	m/min	sfm		
P6	KCP05										200	660		
	KCP10										180	600		
	KCP25										150	500		
	KCP30										105	350		
	KCP40										105	350		