

Speeds and Feeds



How To Use This Chart:

- 1) Select your material in the ISO colored chart
- 2) Start with the recommended SFM (Vc) and feed (inch/tooth)
 - Adjust the SFM and/or feed rate based on your cutting conditions.

HPP - Haas Positive Positive

Workpiece Material	Condition	Insert Grade Hardness HB	Cutting Data										HPP - Haas + \ + Starting Feed Per Tooth		
			HP30		HMP20		HMP35		HK25		Starting Feed Per Tooth				
			Starting SFM		Starting SFM		Starting SFM		Starting SFM					Finishing	Medium Cut
			a _e / D	a _e / D	a _e / D	a _e / D	a _e / D	a _e / D	a _e / D	a _e / D					
P Steel	Unalloyed Steel	0.15% C annealed	125	853	984	804	935	853	984			0.0108	0.0217		
		0.45% C annealed	190	738	836	689	804	738	836						
		0.45% C tempered	250	689	787	656	754	689	787						
		0.75% C annealed	270	607	689	574	656	607	689						
		0.75% C tempered	300	558	640	525	623	558	640						
	Low-alloyed Steel	annealed	180	738	836	689	804	738	836			0.0101	0.0201		
		tempered	275	607	689	574	656	607	689						
		tempered	300	558	640	525	623	558	640						
		tempered	350	476	541	443	525	476	541						
	High-Alloyed Steel and Tool Steel	annealed	200	426	492	410	476	426	492			0.0094	0.0187		
hardened and tempered		325	312	344	295	328	312	344							
M Stainless Steel	Stainless Steel	Ferritic/Matensitic	200			410	476	426	492			0.0074	0.0154		
		Martensitic	240			344	394	361	426						
		Austenitic	180			426	508	459	525						
		Austenitic/Ferritic	240			344	394	361	426						
K Cast Iron	Grey Cast Iron	Perlitic/Ferritic	180			886	1033			1050	1214	0.0117	0.0240		
		Perlitic/Martensitic	260			525	623			623	722				
	DuctileCast Iron	Ferritic	160			607	705			722	836	0.0108	0.0217		
		Perlitic	250			410	476			476	558				
	Malleable Cast Iron	Ferritic	130			738	853			869	1000	0.0108	0.0217		
		Perlitic	230			492	574			574	672				

