

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.

HSHF - Haas Square High Feed

		Cutting Data																
		Insert Grade	HP30			HMP20			HMP35			HSHF - Haas Square High Feed						
Workpiece Material	Condition	Hardness HB	Starting SFM			Starting SFM			Starting SFM			Starting Feed Per Tooth						
			a _e / D		a _e / D	a _e / D		a _e / D	a _e / D		a _e / D		Face Milling		Plunge Milling		Circular Milling	
			1/1	3/4	1/5	1/1	3/4	1/5	1/1	3/4	1/5	1/1	3/4	1/5	Ø 2.0"	Ø 3.0"	Ø 2.0"	Ø 3.0"
P Steel	Unalloyed Steel	0.15% C annealed	125	853	984	804	935	853	984	0.0472	0.0787	0.0098	0.0118	0.0378	0.0551			
		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	0.0441	0.0732	0.0091	0.011	0.0350	0.0512			
		tempered	275	607	689	574	656	607	689									
		tempered	300	558	640	525	623	558	640									
High-Alloyed Steel and Tool Steel	annealed	200	426	492	410	476	426	492	0.0331	0.0551	0.0087	0.0102	0.0331	0.0484				
	hardened and tempered	325	312	344	295	328	312	344										
M Stainless Steel	Stainless Steel	Ferritic/Martensitic	200			410	476	426	492	0.0236	0.0394	0.0071	0.0083	0.0264	0.0386			
		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	Pearlitic/Ferritic	180			886	1033			0.0425	0.0709	0.0110	0.0130	0.0417	0.0606			
		Pearlitic/Martensitic	260			525	623											
	Ductile Cast Iron	Ferritic	160			607	705			0.0425	0.0709	0.0098	0.0118	0.0378	0.0551			
		Pearlitic	250			410	476											
	Malleable Cast Iron	Ferritic	130			738	853			0.0472	0.0787	0.0098	0.0118	0.0378	0.0551			
		Pearlitic	230			492	574											