

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.
Calculated RPM may exceed the maximum RPM of the cutter body. **WARNING:** Never exceed the maximum RPM rating of the cutter body.

HS6NP - Haas Sq Shoulder 6 Negative Positive

			Insert Grade	Cutting Data																		
				HP30			HMP20			HMP35			HK25			HN25			HS6NP - Haas Sq Shoulder 6 - \ +			
	Workpiece Material	Condition		Hardness HB	Starting SFM			Starting SFM			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	a _e / D	a _e / D	a _e / D	a _e / D	a _e / D	a _e / D	Finishing	Medium Cut	Roughing				
P Steel	Unalloyed Steel	0.15% C annealed	125	853	984	804	935	853	984								0.0098					
		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								0.0092					
		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								0.0087					
hardened and tempered		325	312	344	295	328	312	344														
M Stainless Steel	Stainless Steel	Ferritic/Matensitic	200			410	476	426	492								0.0069					
		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				0.0108					
		Perlitic/Martensitic	260			525	623					623	722									
	DuctileCast Iron	Ferritic	160			607	705					722	836				0.0098					
		Perlitic	250			410	476					476	558									
	Malleable Cast Iron	Ferritic	130			738	853					869	1000				0.0098					
		Perlitic	230			492	574					574	672									
N Non-Ferrous	Aluminum Alloys Wrought	Cannot be hardened												4936	5691		0.0084					
		hardened												4018	4658							
	Cast Aluminum Alloys	≤ 12% Si, not hardened												1771	2034		0.0084					
		≤ 12% Si, hardened												1427	1656							
		> 12% Si, not hardened												722	836							
	Copper and Copper Alloys (bronze/brass)	machining steel, PB> 1%												558	640		0.0075					
		CuZn, CuSnZn												689	804							
		CuSn, Pb-free copper, electrolytic copper												1263	1460							

