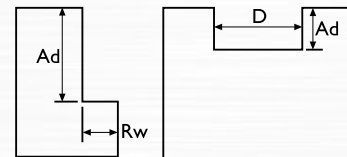


## Z-Carb™ with JetStream Speed and Feed Recommendations

Material Type	Cutting Diameter										
	Bhn	1/2		9/16		5/8		3/4		1	
		rpm	in/min	rpm	in/min	rpm	in/min	rpm	in/min	rpm	in/min
Low Carbon Steels	~175	3,895	37	3,465	35	3,115	33	2,600	31	1,950	25
Low Carbon Steels	~275	3,210	30	2,850	29	2,565	27	2,140	25	1,605	21
Med Alloy Steels	~275	2,675	25	2,375	24	2,140	23	1,785	21	1,335	17
Mold And Die Steels	~275	1,375	13	1,220	12	1,100	11	915	11	690	9
Cast Iron - Gray	~200	3,630	34	3,225	32	2,905	31	2,420	29	1,815	24
Cast Iron - Ductile	~300	1,835	17	1,630	16	1,465	15	1,220	14	915	12
Cast Iron - Malleable	~300	1,145	11	1,020	10	915	9	765	9	575	7
Stainless 300 Series	~275	2,290	16	2,035	20	1,835	16	1,530	15	1,145	15
Stainless 400 Series	~185	3,210	25	2,850	29	2,565	25	2,140	22	1,605	22
Stainless PH Series	~325	1,910	14	1,700	17	1,530	14	1,275	12	955	12
Titanium Alloys	~295	2,290	18	2,035	20	1,835	18	1,530	16	1,145	16
High Temp. Alloys	~300	610	4	545	6	490	4	410	4	305	3

Profiling: Radial Width .5 x Diameter (max.) Profiling: Axial Depth 1.5 x Diameter (max.) Slotting: Axial Depth 1 x Diameter (max.)  
 Avoid re-milling chips  
 Tool holders with adequate gripping pressure are required  
 Stub length solid holders are recommended for heavy stock removal  
 Ramping or spiral plunging are the preferred entry methods into pockets (approximately 6 degrees @ 50% normal feed)

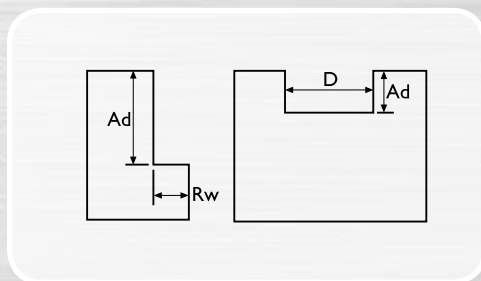


Radial Width of Cut (Rw)  
 Axial Depth of Cut (Ad)  
 Tool Diameter (D)

## Z-Carb™ with JetStream Speed and Feed Recommendations

Material Type	Cutting Diameter								
	Bhn	14		16		18		20	
		rpm	mm/min	rpm	mm/min	rpm	mm/min	rpm	mm/min
Low Carbon Steels	~175	3,535	890	3,095	817	2,750	809	2,475	804
Low Carbon Steels	~275	2,910	733	2,545	672	2,265	667	2,040	662
Med Alloy Steels	~275	2,425	592	2,125	561	1,885	556	1,700	552
Mold And Die Steels	~275	1,250	314	1,090	288	970	285	875	283
Cast Iron - Gray	~200	3,290	829	2,880	761	2,560	754	2,305	749
Cast Iron - Ductile	~300	1,665	419	1,455	384	1,295	381	1,165	378
Cast Iron - Malleable	~300	1,040	262	910	240	810	238	730	236
Stainless 300 Series	~275	2,080	405	1,820	405	1,615	380	1,455	380
Stainless 400 Series	~185	2,910	635	2,545	635	2,265	560	2,040	560
Stainless PH Series	~325	1,735	355	1,515	355	1,350	300	1,215	300
Titanium Alloys	~295	2,080	455	1,820	455	1,615	405	1,455	405
High Temp Alloys	~300	555	100	485	100	430	100	390	100

Profiling: Radial Width .5 x Diameter (max.) Profiling: Axial Depth 1.5 x Diameter (max.) Slotting: Axial Depth 1 x Diameter (max.)  
 Avoid re-milling chips  
 Tool holders with adequate gripping pressure are required  
 Stub length solid holders are recommended for heavy stock removal  
 Ramping or spiral plunging are the preferred entry methods into pockets (approximately 6 degrees @ 50% normal feed)



Radial Width of Cut (Rw)  
 Axial Depth of Cut (Ad)  
 Tool Diameter (D)