

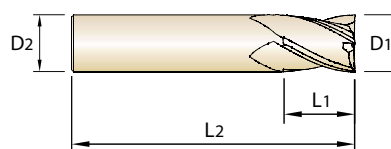
YGBasiX END MILLS



X-Coated **G9H83** SERIES
Uncoated **E5H83** SERIES

X-COATED & UNCOATED SOLID CARBIDE END MILLS 4 FLUTE SQUARE STUB LENGTH

- Suitable for cutting high alloy steels, steel casting, chill casting, malleable cast iron, CrNi-steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics.



P.140-143

Unit : inch

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
X-Coated	Uncoated	D1	D2	L1	L2
G9H83001N	E5H83001	1/64	1/8	0.046	1-1/2
G9H83002N	E5H83002	1/32	1/8	1/16	1-1/2
G9H83003N	E5H83003	3/64	1/8	3/32	1-1/2
G9H83004N	E5H83004	1/16	1/8	1/8	1-1/2
G9H83005N	E5H83005	5/64	1/8	5/32	1-1/2
G9H83006N	E5H83006	3/32	1/8	3/16	1-1/2
G9H83007N	E5H83007	7/64	1/8	7/32	1-1/2
G9H83008N	E5H83008	1/8	1/8	1/4	1-1/2
G9H83009N	E5H83009	9/64	3/16	9/32	2
G9H83010N	E5H83010	5/32	3/16	5/16	2
G9H83011N	E5H83011	11/64	3/16	5/16	2
G9H83012N	E5H83012	3/16	3/16	3/8	2
G9H83013N	E5H83013	13/64	1/4	3/8	2
G9H83014N	E5H83014	7/32	1/4	7/16	2
G9H83015N	E5H83015	15/64	1/4	7/16	2
G9H83016N	E5H83016	1/4	1/4	1/2	2
G9H83018N	E5H83018	9/32	5/16	1/2	2
G9H83020N	E5H83020	5/16	5/16	1/2	2
G9H83024N	E5H83024	3/8	3/8	5/8	2
G9H83028N	E5H83028	7/16	7/16	5/8	2-1/2
G9H83032N	E5H83032	1/2	1/2	5/8	2-1/2
G9H83040N	E5H83040	5/8	5/8	3/4	3
G9H83048N	E5H83048	3/4	3/4	1	3
G9H83064N	E5H83064	1	1	1	3

Mill Dia. Tolerance (inch)	Shank Dia. Tolerance
+0/-0.0012	+0/-0.0005

*Uncoated Tools in this series are not recommended for slotting in stainless steel.

Holemaking

Threading

Milling

Indexable Inserts

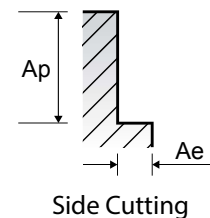
RECOMMENDED CUTTING CONDITIONS

G9H83, G9H84, G9H88, G9H90, G9H92, G9H94, G9H97

SQUARE / CORNER RADIUS / 4 FLUTE / SIDE CUTTING / INCH / X-Coated

	ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)											
							1/8	5/32	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1	
Holemaking	P	1-2	Non-alloy steel	0.1D	1.5D	SFM	170	170	170	170	170	170	170	170	170	170	170	170
						IPT	.0006	.0009	.0011	.0013	.0017	.0022	.0024	.0026	.0038	.0044	.0056	
		RPM		5190	4160	3460	2600	2080	1730	1480	1300	1040	870	650				
		IPM		13	14	15	13	14	15	14	13	16	15	14				
SFM		145		145	145	145	145	145	145	145	145	145	145					
IPT		.0007		.0009	.0011	.0014	.0018	.0023	.0025	.0027	.0038	.0045	.0060					
RPM		4430	3540	2950	2220	1770	1480	1270	1110	890	740	550						
IPM		12	13	13	12	13	13	13	12	13	13	13						
SFM		120	120	120	120	120	120	120	120	120	120	120						
IPT		.0006	.0008	.0010	.0012	.0016	.0020	.0022	.0024	.0040	.0046	.0060						
RPM		3670	2930	2440	1830	1470	1220	1050	920	730	610	460						
IPM		9	9	10	9	9	10	9	9	12	11	11						
Threading	P	6	Low alloy steel	0.1D	1.5D	SFM	170	170	170	170	170	170	170	170	170	170	170	
						IPT	.0006	.0009	.0011	.0013	.0017	.0022	.0024	.0026	.0038	.0044	.0056	
		RPM		5190	4160	3460	2600	2080	1730	1480	1300	1040	870	650				
		IPM		13	14	15	13	14	15	14	13	16	15	14				
SFM		145		145	145	145	145	145	145	145	145	145	145					
IPT		.0007		.0009	.0011	.0014	.0018	.0023	.0025	.0027	.0038	.0045	.0060					
RPM		4430	3540	2950	2220	1770	1480	1270	1110	890	740	550						
IPM		12	13	13	12	13	13	13	12	13	13	13						
SFM		120	120	120	120	120	120	120	120	120	120	120						
IPT		.0006	.0008	.0010	.0012	.0016	.0020	.0022	.0024	.0040	.0046	.0060						
RPM		3670	2930	2440	1830	1470	1220	1050	920	730	610	460						
IPM		9	9	10	9	9	10	9	9	12	11	11						
Milling	P	8-9	High alloyed steel, and tool steel	0.1D	1.5D	SFM	170	170	170	170	170	170	170	170	170	170	170	
						IPT	.0006	.0009	.0011	.0013	.0017	.0022	.0024	.0026	.0038	.0044	.0056	
		RPM		5190	4160	3460	2600	2080	1730	1480	1300	1040	870	650				
		IPM		13	14	15	13	14	15	14	13	16	15	14				
SFM		120		120	120	120	120	120	120	120	120	120	120					
IPT		.0006		.0008	.0010	.0012	.0016	.0020	.0022	.0024	.0040	.0046	.0060					
RPM		3670	2930	2440	1830	1470	1220	1050	920	730	610	460						
IPM		9	9	10	9	9	10	9	9	12	11	11						
Indexable Inserts		M	10	High alloyed steel, and tool steel	0.1D	1.5D	SFM	170	170	170	170	170	170	170	170	170	170	
							IPT	.0006	.0009	.0011	.0013	.0017	.0022	.0024	.0026	.0038	.0044	.0056
			RPM		5190	4160	3460	2600	2080	1730	1480	1300	1040	870	650			
			IPM		13	14	15	13	14	15	14	13	16	15	14			
SFM	120		120		120	120	120	120	120	120	120	120	120					
IPT	.0006		.0008		.0010	.0012	.0016	.0020	.0022	.0024	.0040	.0046	.0060					
RPM	3670		2930	2440	1830	1470	1220	1050	920	730	610	460						
IPM	9		9	10	9	9	10	9	9	12	11	11						
Indexable Inserts	K		11.1	High alloyed steel, and tool steel	0.1D	1.5D	SFM	160	160	160	160	160	160	160	160	160	160	
							IPT	.0003	.0004	.0006	.0007	.0009	.0012	.0013	.0014	.0020	.0025	.0035
			RPM		4890	3910	3260	2440	1960	1630	1400	1220	980	810	610			
			IPM		7	7	7	7	7	8	7	7	8	8	9			
SFM		195	195		195	195	195	195	195	195	195	195	195					
IPT		.0009	.0012		.0016	.0023	.0033	.0041	.0048	.0056	.0078	.0081	.0088					
RPM		5960	4770	3970	2980	2380	1990	1700	1490	1190	990	740						
IPM		22	23	25	27	31	32	33	33	37	32	26						
Indexable Inserts		N	21-25	Aluminum-wrought alloy Aluminum-cast, alloyed	0.1D	1.5D	SFM	490	490	490	490	490	490	490	490	490	490	
							IPT	.0008	.0011	.0013	.0017	.0022	.0027	.0031	.0034	.0044	.0053	.0071
			RPM	14970	11980	9980	7490	5990	4990	4280	3740	2990	2500	1870				
			IPM	45	51	51	50	53	55	52	51	53	53	53				
Indexable Inserts	N		26-29.1	Copper and Copper Alloys (Bronze / Brass) Non Metallic Materials	0.1D	1.5D	SFM	370	370	370	370	370	370	370	370	370	370	
							IPT	.0008	.0010	.0013	.0017	.0022	.0029	.0031	.0034	.0044	.0053	.0069
			RPM	11310	9050	7540	5650	4520	3770	3230	2830	2260	1880	1410				
			IPM	38	38	40	38	40	43	40	38	40	40	39				

SFM = ft./min.
IPT = In./tooth
RPM = rev./min.
IPM = In./min.



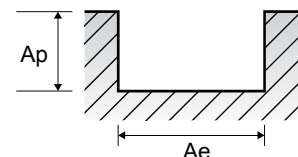
RECOMMENDED CUTTING CONDITIONS

G9H83, G9H84, G9H88, G9H90, G9H92, G9H94, G9H97

SQUARE / CORNER RADIUS / 4 FLUTE / SLOTTING / INCH / X-Coated

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)											
						1/8	5/32	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1	
P	1-2	Non-alloy steel	1.0D	0.3D	SFM	170	170	170	170	170	170	170	170	170	170	170	
					IPT	.0005	.0006	.0008	.0009	.0012	.0015	.0017	.0018	.0025	.0029	.0037	
					RPM	5190	4160	3460	2600	2080	1730	1480	1300	1040	870	650	
					IPM	9	10	10	9	10	11	10	9	11	10	10	
	3-4		1.0D	0.3D	SFM	145	145	145	145	145	145	145	145	145	145	145	
					IPT	.0005	.0006	.0008	.0009	.0013	.0016	.0017	.0019	.0024	.0029	.0039	
					RPM	4430	3540	2950	2220	1770	1480	1270	1110	890	740	550	
					IPM	8	9	9	8	9	9	9	8	9	9	9	
	5		1.0D	0.3D	SFM	120	120	120	120	120	120	120	120	120	120	120	
					IPT	.0004	.0006	.0007	.0008	.0011	.0014	.0015	.0017	.0027	.0032	.0041	
					RPM	3670	2930	2440	1830	1470	1220	1050	920	730	610	460	
					IPM	6	6	7	6	6	7	6	6	8	8	8	
	6	Low alloy steel	1.0D	0.3D	SFM	170	170	170	170	170	170	170	170	170	170	170	
					IPT	.0005	.0006	.0008	.0009	.0012	.0015	.0017	.0018	.0025	.0029	.0037	
					RPM	5190	4160	3460	2600	2080	1730	1480	1300	1040	870	650	
					IPM	9	10	10	9	10	11	10	9	11	10	10	
	7		1.0D	0.3D	SFM	145	145	145	145	145	145	145	145	145	145	145	
					IPT	.0005	.0006	.0008	.0009	.0013	.0016	.0017	.0019	.0024	.0029	.0039	
					RPM	4430	3540	2950	2220	1770	1480	1270	1110	890	740	550	
					IPM	8	9	9	8	9	9	9	8	9	9	9	
	8-9		1.0D	0.3D	SFM	120	120	120	120	120	120	120	120	120	120	120	
					IPT	.0004	.0006	.0007	.0008	.0011	.0014	.0015	.0017	.0027	.0032	.0041	
					RPM	3670	2930	2440	1830	1470	1220	1050	920	730	610	460	
					IPM	6	6	7	6	6	7	6	6	8	8	8	
10	High alloyed steel, and tool steel	1.0D	0.3D	SFM	170	170	170	170	170	170	170	170	170	170	170		
				IPT	.0005	.0006	.0008	.0009	.0012	.0015	.0017	.0018	.0025	.0029	.0037		
				RPM	5190	4160	3460	2600	2080	1730	1480	1300	1040	870	650		
				IPM	9	10	10	9	10	11	10	9	11	10	10		
11.1		1.0D	0.3D	SFM	120	120	120	120	120	120	120	120	120	120	120		
				IPT	.0004	.0006	.0007	.0008	.0011	.0014	.0015	.0017	.0027	.0032	.0041		
				RPM	3670	2930	2440	1830	1470	1220	1050	920	730	610	460		
				IPM	6	6	7	6	6	7	6	6	8	8	8		
M	14.1	Stainless steel	1.0D	0.3D	SFM	120	120	120	120	120	120	120	120	120	120		
					IPT	.0004	.0006	.0007	.0008	.0011	.0014	.0015	.0017	.0027	.0032	.0041	
					RPM	3670	2930	2440	1830	1470	1220	1050	920	730	610	460	
					IPM	6	6	7	6	6	7	6	6	8	8	8	
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	1.0D	0.3D	SFM	195	195	195	195	195	195	195	195	195	195		
					IPT	.0006	.0008	.0011	.0015	.0022	.0027	.0032	.0037	.0051	.0061	.0080	
					RPM	5960	4770	3970	2980	2380	1990	1700	1490	1190	990	740	
					IPM	15	16	17	18	21	22	22	22	24	24	24	
N	21-25	Aluminum-wrought alloy Aluminum-cast, alloyed	1.0D	0.5D	SFM	490	490	490	490	490	490	490	490	490	490		
					IPT	.0005	.0008	.0009	.0011	.0015	.0019	.0021	.0023	.0030	.0036	.0048	
					RPM	14970	11980	9980	7490	5990	4990	4280	3740	2990	2500	1870	
					IPM	32	36	36	34	36	37	36	34	36	36	36	
	26-29.1	Copper and Copper Alloys (Bronze / Brass) Non Metallic Materials	1.0D	0.5D	SFM	370	370	370	370	370	370	370	370	370	370		
					IPT	.0006	.0007	.0009	.0012	.0015	.0020	.0021	.0023	.0030	.0036	.0047	
					RPM	11310	9050	7540	5650	4520	3770	3230	2830	2260	1880	1410	
					IPM	25	25	27	26	27	29	28	26	27	27	27	

SFM = ft./min.
IPT = In./tooth
RPM = rev./min.
IPM = In./min.



Slotting