

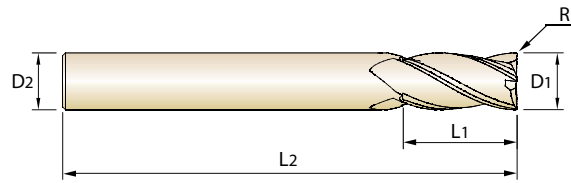
YGBasiX END MILLS



X-Coated **G9H97** SERIES
Uncoated **E5H97** SERIES

X-COATED & UNCOATED SOLID CARBIDE END MILLS 4 FLUTE CORNER RADIUS REGULAR 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.		Corner Radius	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
X-Coated	Uncoated	R	D1	D2	L1	L2
G9H97008N	E5H97008	R.005	1/8	1/8	1/2	1-1/2
G9H97901N	E5H97901	R.010	1/8	1/8	1/2	1-1/2
G9H97902N	E5H97902	R.015	1/8	1/8	1/2	1-1/2
G9H97903N	E5H97903	R.020	1/8	1/8	1/2	1-1/2
G9H97904N	E5H97904	R.030	1/8	1/8	1/2	1-1/2
G9H97012N	E5H97012	R.010	3/16	3/16	5/8	2
G9H97905N	E5H97905	R.015	3/16	3/16	5/8	2
G9H97906N	E5H97906	R.020	3/16	3/16	5/8	2
G9H97907N	E5H97907	R.030	3/16	3/16	5/8	2
G9H97908N	E5H97908	R.045	3/16	3/16	5/8	2
G9H97909N	E5H97909	R.050	3/16	3/16	5/8	2
G9H97910N	E5H97910	R.060	3/16	3/16	5/8	2
G9H97016N	E5H97016	R.005	1/4	1/4	3/4	2-1/2
G9H97911N	E5H97911	R.010	1/4	1/4	3/4	2-1/2
G9H97912N	E5H97912	R.015	1/4	1/4	3/4	2-1/2
G9H97913N	E5H97913	R.020	1/4	1/4	3/4	2-1/2
G9H97914N	E5H97914	R.025	1/4	1/4	3/4	2-1/2
G9H97915N	E5H97915	R.030	1/4	1/4	3/4	2-1/2
G9H97916N	E5H97916	R.045	1/4	1/4	3/4	2-1/2
G9H97917N	E5H97917	R.060	1/4	1/4	3/4	2-1/2
G9H97918N	E5H97918	R.090	1/4	1/4	3/4	2-1/2
G9H97020N	E5H97020	R.015	5/16	5/16	13/16	2-1/2
G9H97919N	E5H97919	R.020	5/16	5/16	13/16	2-1/2
G9H97920N	E5H97920	R.025	5/16	5/16	13/16	2-1/2
G9H97921N	E5H97921	R.030	5/16	5/16	13/16	2-1/2
G9H97922N	E5H97922	R.045	5/16	5/16	13/16	2-1/2
G9H97923N	E5H97923	R.060	5/16	5/16	13/16	2-1/2
G9H97924N	E5H97924	R.090	5/16	5/16	13/16	2-1/2
G9H97925N	E5H97925	R.125	5/16	5/16	13/16	2-1/2
G9H97024N	E5H97024	R.015	3/8	3/8	1	2-1/2
G9H97926N	E5H97926	R.020	3/8	3/8	1	2-1/2
G9H97927N	E5H97927	R.025	3/8	3/8	1	2-1/2
G9H97928N	E5H97928	R.030	3/8	3/8	1	2-1/2
G9H97929N	E5H97929	R.045	3/8	3/8	1	2-1/2
G9H97930N	E5H97930	R.060	3/8	3/8	1	2-1/2
G9H97931N	E5H97931	R.090	3/8	3/8	1	2-1/2
G9H97932N	E5H97932	R.125	3/8	3/8	1	2-1/2
G9H97028N	E5H97028	R.015	7/16	7/16	1	2-3/4
G9H97933N	E5H97933	R.020	7/16	7/16	1	2-3/4
G9H97934N	E5H97934	R.025	7/16	7/16	1	2-3/4
G9H97935N	E5H97935	R.030	7/16	7/16	1	2-3/4
G9H97936N	E5H97936	R.045	7/16	7/16	1	2-3/4
G9H97937N	E5H97937	R.060	7/16	7/16	1	2-3/4
G9H97938N	E5H97938	R.090	7/16	7/16	1	2-3/4
G9H97939N	E5H97939	R.125	7/16	7/16	1	2-3/4
G9H97032N	E5H97032	R.015	1/2	1/2	1	3

► NEXT PAGE

Unit : inch

EDP No.		Corner Radius	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
X-Coated	Uncoated	R	D1	D2	L1	L2
G9H97940N	E5H97940	R.020	1/2	1/2	1	3
G9H97941N	E5H97941	R.025	1/2	1/2	1	3
G9H97942N	E5H97942	R.030	1/2	1/2	1	3
G9H97943N	E5H97943	R.045	1/2	1/2	1	3
G9H97944N	E5H97944	R.060	1/2	1/2	1	3
G9H97945N	E5H97945	R.090	1/2	1/2	1	3
G9H97946N	E5H97946	R.125	1/2	1/2	1	3
G9H97040N	E5H97040	R.015	5/8	5/8	1-1/4	3-1/2
G9H97947N	E5H97947	R.020	5/8	5/8	1-1/4	3-1/2
G9H97948N	E5H97948	R.025	5/8	5/8	1-1/4	3-1/2
G9H97949N	E5H97949	R.030	5/8	5/8	1-1/4	3-1/2
G9H97950N	E5H97950	R.045	5/8	5/8	1-1/4	3-1/2
G9H97951N	E5H97951	R.060	5/8	5/8	1-1/4	3-1/2
G9H97952N	E5H97952	R.090	5/8	5/8	1-1/4	3-1/2
G9H97953N	E5H97953	R.125	5/8	5/8	1-1/4	3-1/2
G9H97048N	E5H97048	R.015	3/4	3/4	1-1/2	4
G9H97954N	E5H97954	R.020	3/4	3/4	1-1/2	4
G9H97955N	E5H97955	R.025	3/4	3/4	1-1/2	4
G9H97956N	E5H97956	R.030	3/4	3/4	1-1/2	4
G9H97957N	E5H97957	R.045	3/4	3/4	1-1/2	4
G9H97958N	E5H97958	R.060	3/4	3/4	1-1/2	4
G9H97959N	E5H97959	R.090	3/4	3/4	1-1/2	4
G9H97960N	E5H97960	R.125	3/4	3/4	1-1/2	4
G9H97961N	E5H97961	R.190	3/4	3/4	1-1/2	4
G9H97962N	E5H97962	R.250	3/4	3/4	1-1/2	4
G9H97064N	E5H97064	R.015	1	1	1-1/2	4
G9H97963N	E5H97963	R.020	1	1	1-1/2	4
G9H97964N	E5H97964	R.025	1	1	1-1/2	4
G9H97965N	E5H97965	R.030	1	1	1-1/2	4
G9H97966N	E5H97966	R.045	1	1	1-1/2	4
G9H97967N	E5H97967	R.060	1	1	1-1/2	4
G9H97968N	E5H97968	R.090	1	1	1-1/2	4
G9H97969N	E5H97969	R.125	1	1	1-1/2	4
G9H97970N	E5H97970	R.190	1	1	1-1/2	4
G9H97971N	E5H97971	R.250	1	1	1-1/2	4

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

*Only Coated Tools in this series are recommended for stainless steel machining

Holemaking

Threading

Milling

Indexable Inserts

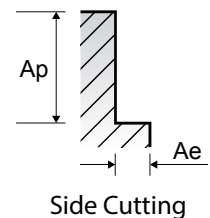
RECOMMENDED CUTTING CONDITIONS

E5H83, E5H84, E5H88, E5H90, E5H92, E5H94, E5H97

SQUARE / CORNER RADIUS / 4 FLUTE / SIDE CUTTING / INCH / Uncoated

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	0.1D	1.5D	SFM	110	110	110	110	110	110	110	110	110	110	110	
					IPT	.0006	.0009	.0011	.0013	.0017	.0022	.0024	.0027	.0038	.0045	.0059	
					RPM	3360	2690	2240	1680	1340	1120	960	840	670	560	420	
	3-4		0.1D	1.5D	IPM	9	9	10	9	9	10	9	9	10	10	10	
					SFM	95	95	95	95	95	95	95	95	95	95	95	
					IPT	.0007	.0009	.0011	.0013	.0018	.0023	.0025	.0027	.0038	.0045	.0057	
	5		0.1D	1.5D	RPM	2900	2320	1940	1450	1160	970	830	730	580	480	360	
					IPM	8	8	9	8	8	9	8	8	9	9	8	
					SFM	80	80	80	80	80	80	80	80	80	80	80	
	6		0.1D	1.5D	IPT	.0006	.0008	.0010	.0012	.0016	.0020	.0022	.0024	.0039	.0046	.0059	
					RPM	2440	1960	1630	1220	980	810	700	610	490	410	310	
					IPM	6	6	7	6	6	6	6	6	8	7	7	
	7	0.1D	1.5D	SFM	110	110	110	110	110	110	110	110	110	110	110		
				IPT	.0006	.0009	.0011	.0013	.0017	.0022	.0024	.0027	.0038	.0045	.0059		
				RPM	3360	2690	2240	1680	1340	1120	960	840	670	560	420		
	8-9	0.1D	1.5D	IPM	9	9	10	9	9	10	9	9	10	10	10		
				SFM	95	95	95	95	95	95	95	95	95	95	95		
				IPT	.0007	.0009	.0011	.0013	.0018	.0023	.0025	.0027	.0038	.0045	.0057		
	10	0.1D	1.5D	RPM	2900	2320	1940	1450	1160	970	830	730	580	480	360		
				IPM	8	8	9	8	8	9	8	8	9	9	8		
				SFM	80	80	80	80	80	80	80	80	80	80	80		
	11.1	0.1D	1.5D	IPT	.0006	.0008	.0010	.0012	.0016	.0020	.0022	.0024	.0039	.0046	.0059		
				RPM	2440	1960	1630	1220	980	810	700	610	490	410	310		
				IPM	6	6	7	6	6	6	6	6	8	7	7		
	M	14.1	Stainless steel	0.1D	1.5D	SFM	110	110	110	110	110	110	110	110	110	110	
						IPT	.0006	.0009	.0011	.0013	.0017	.0022	.0024	.0027	.0038	.0045	.0059
						RPM	3360	2690	2240	1680	1340	1120	960	840	670	560	420
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.1D	1.5D	IPM	9	9	10	9	9	10	9	9	10	10		
					SFM	100	100	100	100	100	100	100	100	100	100	100	
					IPT	.0003	.0004	.0006	.0007	.0009	.0011	.0012	.0014	.0020	.0025	.0033	
N	21-25	Aluminum-wrought alloy Aluminum-cast, alloyed	0.1D	1.5D	RPM	3060	2440	2040	1530	1220	1020	870	760	610	510	380	
					IPM	4	4	5	4	4	5	4	4	5	5	5	
					SFM	125	125	125	125	125	125	125	125	125	125	125	
	26-29.1	Copper and Copper Alloys (Bronze / Brass) Non Metallic Materials	0.1D	1.5D	IPT	.0010	.0012	.0016	.0023	.0032	.0041	.0048	.0056	.0075	.0092	.0124	
					RPM	3820	3060	2550	1910	1530	1270	1090	950	760	640	480	
					IPM	15	15	16	17	19	21	21	21	23	23	24	
					SFM	315	315	315	315	315	315	315	315	315	315	315	
					IPT	.0008	.0011	.0013	.0017	.0023	.0028	.0032	.0035	.0045	.0053	.0068	
					RPM	9630	7700	6420	4810	3850	3210	2750	2410	1930	1600	1200	
					IPM	30	33	34	33	35	36	35	34	35	34	33	
					SFM	235	235	235	235	235	235	235	235	235	235	235	
IPT	.0007	.0010	.0012	.0017	.0023	.0029	.0032	.0035	.0046	.0054	.0069						
RPM	7180	5740	4790	3590	2870	2390	2050	1800	1440	1200	900						
IPM	20	22	23	25	26	28	26	25	27	26	25						

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



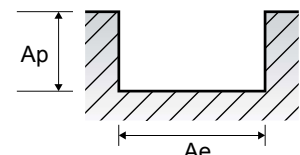
RECOMMENDED CUTTING CONDITIONS

E5H83, E5H84, E5H88, E5H90, E5H92, E5H94, E5H97

SQUARE / CORNER RADIUS / 4 FLUTE / SLOTTING / INCH / Uncoated

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	110	110	110	110	110	110	110	110	110	110	110	
					IPT	.0004	.0006	.0007	.0009	.0011	.0014	.0016	.0018	.0025	.0030	.0039	
					RPM	3360	2690	2240	1680	1340	1120	960	840	670	560	420	
	3-4		1.0D	0.3D	IPM	6	6	6	6	6	6	6	6	7	7	7	
					SFM	95	95	95	95	95	95	95	95	95	95	95	
					IPT	.0005	.0006	.0008	.0009	.0012	.0015	.0017	.0018	.0026	.0030	.0038	
	5		1.0D	0.3D	RPM	2900	2320	1940	1450	1160	970	830	730	580	480	360	
					IPM	5	6	6	5	6	6	6	5	6	6	6	
					SFM	80	80	80	80	80	80	80	80	80	80	80	
	6		1.0D	0.3D	IPT	.0004	.0005	.0007	.0008	.0011	.0014	.0015	.0016	.0027	.0032	.0041	
		RPM			2440	1960	1630	1220	980	810	700	610	490	410	310		
		IPM			4	4	4	4	4	4	4	4	5	5	5		
	7	Low alloy steel	1.0D	0.3D	SFM	110	110	110	110	110	110	110	110	110	110	110	
					IPT	.0004	.0006	.0007	.0009	.0011	.0014	.0016	.0018	.0025	.0030	.0039	
					RPM	3360	2690	2240	1680	1340	1120	960	840	670	560	420	
	8-9		1.0D	0.3D	IPM	6	6	6	6	6	6	6	6	7	7	7	
					SFM	95	95	95	95	95	95	95	95	95	95	95	
					IPT	.0005	.0006	.0008	.0009	.0012	.0015	.0017	.0018	.0026	.0030	.0038	
	10		High alloyed steel, and tool steel	1.0D	0.3D	RPM	2900	2320	1940	1450	1160	970	830	730	580	480	360
						IPM	5	6	6	5	6	6	6	5	6	6	6
						SFM	80	80	80	80	80	80	80	80	80	80	80
	11.1	1.0D		0.3D	IPT	.0004	.0005	.0007	.0008	.0011	.0014	.0015	.0016	.0027	.0032	.0041	
					RPM	2440	1960	1630	1220	980	810	700	610	490	410	310	
					IPM	4	4	4	4	4	4	4	4	5	5	5	
	K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	1.0D	0.3D	SFM	125	125	125	125	125	125	125	125	125	125	125
IPT						.0006	.0008	.0011	.0015	.0021	.0027	.0032	.0037	.0050	.0061	.0084	
RPM						3820	3060	2550	1910	1530	1270	1090	950	760	640	480	
N	21-25	Aluminum-wrought alloy Aluminum-cast, alloyed	1.0D	0.5D	IPM	10	10	11	12	13	14	14	14	15	16	16	
					SFM	315	315	315	315	315	315	315	315	315	315	315	
					IPT	.0005	.0007	.0009	.0011	.0015	.0019	.0021	.0023	.0030	.0035	.0045	
	26-29.1	Copper and Copper Alloys (Bronze / Brass) Non Metallic Materials	1.0D	0.5D	RPM	9630	7700	6420	4810	3850	3210	2750	2410	1930	1600	1200	
					IPM	20	22	23	22	23	24	23	22	23	23	22	
					SFM	235	235	235	235	235	235	235	235	235	235	235	
					IPT	.0005	.0007	.0009	.0012	.0015	.0019	.0021	.0023	.0031	.0036	.0046	
					RPM	7180	5740	4790	3590	2870	2390	2050	1800	1440	1200	900	
					IPM	15	16	17	17	18	18	17	17	18	17	17	

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



Slotting

Holemaking

Threading

Milling

Indexable Inserts