



FLAT SHANK

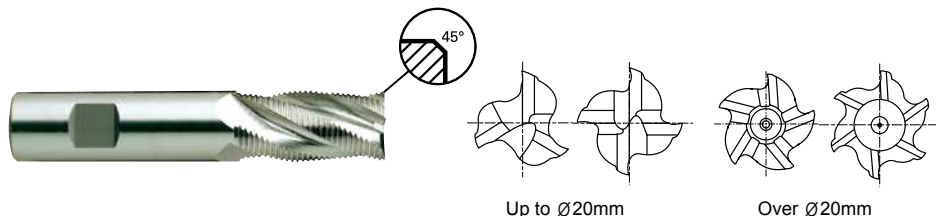
E2753 SERIES

FLAT SHANK

EQ753 SERIES

HSSCo8, MULTI FLUTE SHORT LENGTH ROUGHING - FINE

- HSSCo8, MULTI SCHNEIDEN KURZ SCHRUPPFRÄSER - FEIN
- Fraise HSSCo8, multi-dents ébauche, pas fin, courte
- MULTI TAGLIENTE, PER SGROSSATURA, SERIE CORTA, BOMBATO FINE - HSSCo8



HSS Co8
DIN 844
HR
3-6
30°
DIN 1835B
~Ø20
Ø25~
C x 45°
P.764~767

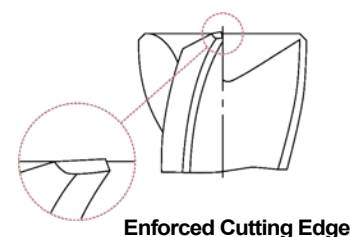
Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer	
							UNCOATED
E2753060	EQ753060	6.0	6	13	57	3	0.18
E2753070	EQ753070	7.0	10	16	66	3	0.18
E2753080	EQ753080	8.0	10	19	69	3	0.18
E2753090	EQ753090	9.0	10	19	69	3	0.18
E2753100	EQ753100	10.0	10	22	72	4	0.18
E2753110	EQ753110	11.0	12	22	79	4	0.18
E2753120	EQ753120	12.0	12	26	83	4	0.18
E2753130	EQ753130	13.0	12	26	83	4	0.18
E2753140	EQ753140	14.0	12	26	83	4	0.25
E2753150	EQ753150	15.0	12	26	83	4	0.25
E2753160	EQ753160	16.0	16	32	92	4	0.25
E2753180	EQ753180	18.0	16	32	92	4	0.25
E2753200	EQ753200	20.0	20	38	104	4	0.25
E2753250	EQ753250	25.0	25	45	121	5	0.36
E2753280	EQ753280	28.0	25	45	121	6	0.36
E2753300	EQ753300	30.0	25	45	121	6	0.36
E2753320	EQ753320	32.0	32	53	133	6	0.51
E2753350	EQ753350	35.0	32	53	133	6	0.51
E2753400	EQ753400	40.0	32	63	155	6	0.56

- ▶ Other shank design on your request.
- ▶ TiN and TiCN Coatings are available on your request.

Tolerances according to DIN 7160 & 7161

	Tolerance range in μm					
	Nominal-Diameter in mm					
	from 1 to 3	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30	over 30 to 50
js12	± 50	± 60	± 75	± 90	± 105	± 125
h6	0 -6	0 -8	0 -9	0 -11	0 -13	0 -16



Enforced Cutting Edge

◎ : Excellent ○ : Good

ISO Material Description	P											M			K						
	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎																

E2761, E2753, E2762, E2751, E2764, E2752, E2765, E2778, E2777 SERIES

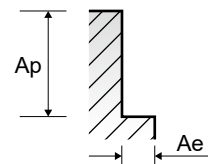
Vc = m/min.
fz = mm/tooth
RPM = rev./min.
FEED = mm/min.

MULTI FLUTE ROUGHING - SIDE CUTTING

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)					
						6.0	8.0	10.0	12.0	14.0	16.0
P	1	Non-alloy steel	0.5D	1.5D	Vc	35	35	35	35	35	35
					fz	0.015	0.025	0.034	0.05	0.056	0.064
					RPM	1857	1393	1114	928	796	696
	2		0.5D	1.5D	Vc	30	30	30	30	30	30
					fz	0.013	0.023	0.033	0.044	0.05	0.063
					RPM	1592	1194	955	796	682	597
	3-4		0.5D	1.5D	Vc	25	25	25	25	25	25
					fz	0.015	0.024	0.034	0.044	0.049	0.061
					RPM	1326	995	796	663	568	497
	5		0.5D	1.5D	Vc	15	15	15	15	15	15
					fz	0.013	0.021	0.033	0.044	0.05	0.063
RPM		796			597	477	398	341	298		
6	0.5D	1.5D	Vc	30	30	30	30	30	30		
			fz	0.013	0.023	0.033	0.044	0.05	0.063		
			RPM	1592	1194	955	796	682	597		
7	0.5D	1.5D	Vc	25	25	25	25	25	25		
			fz	0.015	0.024	0.034	0.044	0.049	0.061		
			RPM	1326	995	796	663	568	497		
8-9	0.5D	1.5D	Vc	15	15	15	15	15	15		
			fz	0.013	0.021	0.033	0.044	0.05	0.063		
			RPM	796	597	477	398	341	298		
10	0.5D	1.5D	Vc	30	30	30	30	30	30		
			fz	0.013	0.023	0.033	0.044	0.05	0.063		
			RPM	1592	1194	955	796	682	597		
11.1	0.5D	1.5D	Vc	15	15	15	15	15	15		
			fz	0.013	0.021	0.033	0.044	0.05	0.063		
			RPM	796	597	477	398	341	298		
21-22	0.5D	1.5D	Vc	85	80	80	75	80	80		
			fz	0.015	0.025	0.035	0.05	0.058	0.07		
			RPM	4509	3183	2546	1989	1819	1592		
23-24	0.5D	1.5D	Vc	55	52	52	49	52	52		
			fz	0.015	0.025	0.035	0.05	0.058	0.07		
			RPM	2918	2069	1655	1300	1182	1035		
					FEED	131	155	232	260	274	290

※ The FEED, in long & extra long types, should be reduced by around 50%

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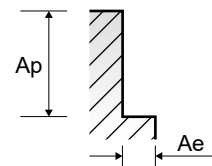


Vc = m/min.
fz = mm/tooth
RPM = rev./min.
FEED = mm/min.

E2761, E2753, E2762, E2751, E2764, E2752, E2765, E2778, E2777 SERIES

MULTI FLUTE ROUGHING - SIDE CUTTING

VDI 3323	Parameter	Diameter (Ø)									
		18.0	20.0	22.0	25.0	28.0	30.0	32.0	36.0	40.0	50.0
1	Vc	35	35	35	35	35	35	35	35	35	35
	fz	0.071	0.08	0.088	0.098	0.088	0.1	0.1	0.113	0.119	0.152
	RPM	619	557	506	446	398	371	348	309	279	223
	FEED	176	178	223	218	210	223	209	210	199	203
2	Vc	30	30	30	30	30	30	30	30	30	30
	fz	0.07	0.078	0.076	0.085	0.076	0.086	0.095	0.107	0.114	0.157
	RPM	531	477	434	382	341	318	298	265	239	191
	FEED	149	149	165	162	156	164	170	170	163	180
3-4	Vc	25	25	25	25	25	25	20	25	25	25
	fz	0.069	0.069	0.08	0.09	0.077	0.087	0.098	0.108	0.111	0.146
	RPM	442	398	362	318	284	265	199	221	199	159
	FEED	122	110	145	143	131	138	117	143	132	139
5	Vc	15	15	15	15	15	15	15	15	15	15
	fz	0.07	0.08	0.077	0.094	0.089	0.089	0.101	0.118	0.121	0.148
	RPM	265	239	217	191	171	159	149	133	119	95
	FEED	74	76	84	90	91	85	90	94	87	85
6	Vc	30	30	30	30	30	30	30	30	30	30
	fz	0.07	0.078	0.076	0.085	0.076	0.086	0.095	0.107	0.114	0.157
	RPM	531	477	434	382	341	318	298	265	239	191
	FEED	149	149	165	162	156	164	170	170	163	180
7	Vc	25	25	25	25	25	25	20	25	25	25
	fz	0.069	0.069	0.08	0.09	0.077	0.087	0.098	0.108	0.111	0.146
	RPM	442	398	362	318	284	265	199	221	199	159
	FEED	122	110	145	143	131	138	117	143	132	139
8-9	Vc	15	15	15	15	15	15	15	15	15	15
	fz	0.07	0.08	0.077	0.094	0.089	0.089	0.101	0.118	0.121	0.148
	RPM	265	239	217	191	171	159	149	133	119	95
	FEED	74	76	84	90	91	85	90	94	87	85
10	Vc	30	30	30	30	30	30	30	30	30	30
	fz	0.07	0.078	0.076	0.085	0.076	0.086	0.095	0.107	0.114	0.157
	RPM	531	477	434	382	341	318	298	265	239	191
	FEED	149	149	165	162	156	164	170	170	163	180
11.1	Vc	15	15	15	15	15	15	15	15	15	15
	fz	0.07	0.08	0.077	0.094	0.089	0.089	0.101	0.118	0.121	0.148
	RPM	265	239	217	191	171	159	149	133	119	95
	FEED	74	76	84	90	91	85	90	94	87	85
21 - 22	Vc	80	75	75	80	80	85	80	80	80	80
	fz	0.084	0.104	0.085	0.09	0.094	0.098	0.104	0.112	0.119	0.123
	RPM	1415	1194	1085	1019	909	902	796	707	637	509
	FEED	475	497	461	458	513	530	497	475	455	376
23 - 24	Vc	52	49	49	52	52	55	52	52	52	52
	fz	0.084	0.104	0.085	0.09	0.094	0.098	0.104	0.112	0.119	0.123
	RPM	920	780	709	662	591	584	517	460	414	331
	FEED	309	324	301	298	333	343	323	309	295	244



SELECTION GUIDE



MILLING TOOLS

SERIES	E2524	E2753	E2762	E2757	E2764	E2765	E2755
FLUTE	3&4	Multi Flute	Multi Flute	3&4	3	3	3
HELIX ANGLE	30°	30°	30°	30°	30°	30°	37°
	SQUARE ROUGHING	SQUARE ROUGHING	SQUARE ROUGHING	BALL NOSE ROUGHING	SQUARE ROUGHING	SQUARE ROUGHING	SQUARE ROUGHING
SIZE MIN	D6.0	D6.0	D6.0	R4.0	D10.0	D10.0	D6.0
SIZE MAX	D20.0	D40.0	D40.0	R12.5	D40.0	D40.0	D30.0
PAGE	719	720	721	722	723	724	725

HSS GENERAL HSS END MILLS

General Purpose, Non-coated, Any Coating Available

◎ : Excellent ○ : Good

Recommended cutting conditions : P 738

Please visit globalyg1.com/mat for material search



STUB LENGTH	SHORT LENGTH	LONG LENGTH	SHORT LENGTH	SHORT LENGTH	LONG LENGTH	SHORT LENGTH
Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated
HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8



ISO	VDI 3323	Material Description	HB	HRc	E2524	E2753	E2762	E2757	E2764	E2765	E2755
P	1	Non-alloy steel	125		◎	◎	◎	◎	◎	◎	◎
	2		190	13	◎	◎	◎	◎	◎	◎	◎
	3		250	25	◎	◎	◎	◎	◎	◎	○
	4		270	28	◎	◎	◎	◎	◎	◎	○
	5	300	32	◎	◎	◎	◎	◎	◎	○	
	6	Low alloy steel	180	10	◎	◎	◎	◎	◎	◎	◎
	7		275	29	◎	◎	◎	◎	◎	◎	○
	8		300	32	◎	◎	◎	◎	◎	◎	○
	9	High alloyed steel, and tool steel	350	38	○	○	○	○	○	○	○
	10		200	15	◎	◎	◎	◎	◎	◎	◎
	11		325	35	○	○	○	○	○	○	○
M	12	Stainless steel	200	15							
	13		240	23							
D-POWER GRAPHITE END MILLS	14		180	10							
	15	Grey cast iron	180	10							
16	260		26								
D-POWER CFRP END MILLS	17	Nodular cast iron	160	3							
	18		250	25							
	19	Malleable cast iron	130								
	20		230	21							
ROUTERS	21	Aluminum-wrought alloy	60		○	○	○	○	○	○	◎
	22		100		○	○	○	○	○	○	◎
	23	Aluminum-cast, alloyed	75		○	○	○	○	○	○	◎
	24		90		○	○	○	○	○	○	◎
	25		130		○	○	○	○	○	○	○
	26	Copper and Copper Alloys (Bronze / Brass)	110								
	27		90								
	28		100								
	29	Non Metallic Materials									
30											
GENERAL HSS END MILLS	31	Heat Resistant Super Alloys	200	15							
	32		280	30							
	33		250	25							
	34		350	38							
	35		320	34							
	36	Titanium Alloys	400 Rm								
37	1050 Rm										
MILLING CUTTERS	38	Hardened steel	550	55							
	39		630	60							
	40	Chilled Cast Iron	400	42							
	41	Hardened Cast Iron	550	55							