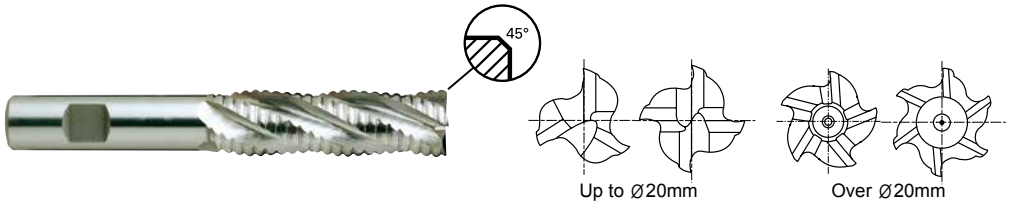
HSSCo8, MULTI FLUTE LONG LENGTH ROUGHING - COARSE

HSSCo8, MULTI SCHNEIDEN LANG SCHRUPPFRÄSER - GROB
Fraise HSSCo8, multi-dents ébauche, pas grossier, longue
MULTI TAGLIENTE, PER SGROSSATURA, SERIE LUNGA, BOMBATO GROSSO - HSSCo8



HSS Co8 | DIN 844 | NR | 3-6 | 30° | DIN 1835B | ~Ø20 | Ø22~ | C x 45°

P.764~767

Unit : mm

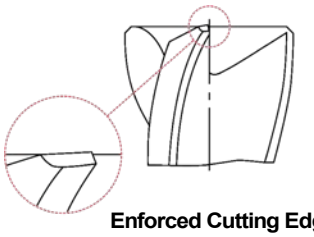
EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
UNCOATED	TiAlN	js12	h6				
E2752060	EQ752060	6.0	6	24	68	3	0.25
E2752070	EQ752070	7.0	10	30	80	3	0.25
E2752080	EQ752080	8.0	10	38	88	3	0.25
E2752090	EQ752090	9.0	10	38	88	3	0.34
E2752100	EQ752100	10.0	10	45	95	4	0.34
E2752110	EQ752110	11.0	12	45	102	4	0.50
E2752120	EQ752120	12.0	12	53	110	4	0.50
E2752130	EQ752130	13.0	12	53	110	4	0.50
E2752140	EQ752140	14.0	12	53	110	4	0.55
E2752150	EQ752150	15.0	12	53	110	4	0.55
E2752160	EQ752160	16.0	16	63	123	4	0.55
E2752170	EQ752170	17.0	16	63	123	4	0.55
E2752180	EQ752180	18.0	16	63	123	4	0.55
E2752190	EQ752190	19.0	16	63	123	4	0.55
E2752200	EQ752200	20.0	20	75	141	4	0.55
E2752901	EQ752901	20.0	16	75	135	4	0.55
E2752220	EQ752220	22.0	20	75	141	5	0.55
E2752902	EQ752902	22.0	25	75	151	5	0.55

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

▶ NEXT PAGE

Tolerances according to DIN 7160 & 7161

Tolerance range in ㎛ / Nominal-Diameter in ㎜	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	P											M			K					
Material Description	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	◎	◎	◎	◎	◎	◎	◎	◎	○	◎	○									

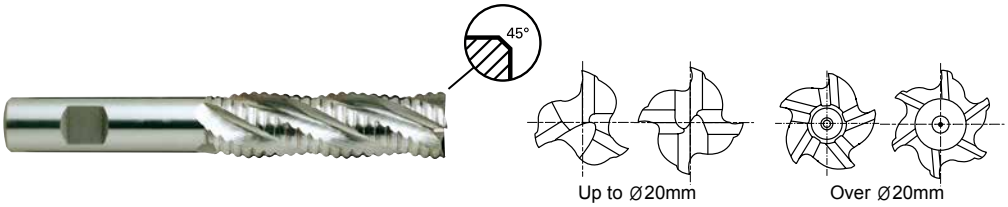
ISO	N										S							H			
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	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	○	○	○	○	○																

HSS END MILLS

FLAT SHANK **E2752** SERIES
FLAT SHANK **EQ752** SERIES

HSSCo8, MULTI FLUTE LONG LENGTH ROUGHING - COARSE

- HSSCo8, MULTI SCHNEIDEN LANG SCHRUPPFRÄSER - GROB
- Fraise HSSCo8, multi-dents ébauche, pas grossier, longue
- MULTI TAGLIENTE, PER SGROSSATURA, SERIE LUNGA, BOMBATO GROSSO - HSSCo8



HSS Co8 | DIN 844 | NR | 3-6 | 30° | DIN 1835B | ~Ø20 | Ø22~ | C x 45° P.764~767

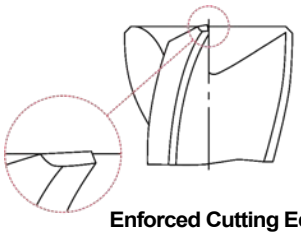
Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
UNCOATED	TiAlN	js12	h6				
E2752240	**EQ752240**	**24.0**	25	90	166	5	0.55
E2752250	**EQ752250**	**25.0**	25	90	166	5	0.55
E2752260	**EQ752260**	**26.0**	25	90	166	6	0.55
E2752280	**EQ752280**	**28.0**	25	90	166	6	0.70
E2752300	**EQ752300**	**30.0**	25	90	166	6	0.70
E2752320	**EQ752320**	**32.0**	32	106	186	6	0.70
E2752350	**EQ752350**	**35.0**	32	106	186	6	0.70
E2752360	**EQ752360**	**36.0**	32	106	186	6	0.70
E2752380	**EQ752380**	**38.0**	32	125	217	6	0.70
E2752938	**EQ752938**	**38.0**	40	125	217	6	0.70
E2752400	**EQ752400**	**40.0**	32	125	217	6	0.88
E2752940	**EQ752940**	**40.0**	40	125	217	6	0.88

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

Tolerances according to DIN 7160 & 7161

Tolerance range in ㎛ / Nominal-Diameter in ㎜	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	P											M			K					
Material Description	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	N										S							H			
Material Description	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	○	○	○	○	○																

HSS END MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

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

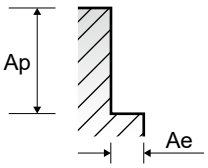
Vc = m/min.
fz = mm/tooth
RPM = rev./min.
FEED = mm/min.

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
					FEED	84	104	152	186	178	178
	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
					FEED	62	82	126	140	136	150
	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
					FEED	60	72	108	117	111	121
	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
					FEED	31	38	63	70	68	75
	6	Low alloy steel	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
					FEED	62	82	126	140	136	150
	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
					FEED	60	72	108	117	111	121
	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
					FEED	31	38	63	70	68	75
	10	High alloyed steel, and tool steel	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
					FEED	62	82	126	140	136	150
	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
					FEED	31	38	63	70	68	75
N	21-22	Aluminum-wrought alloy	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
					FEED	203	239	357	398	422	446
	23-24	Aluminum-cast, alloyed	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%

▶ NEXT PAGE

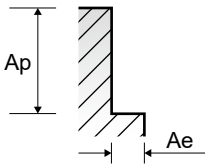


E2761, E2753, E2762, E2751, E2764, E2752, E2765, E2778, E2777 SERIES

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

MULTI FLUTE ROUGHING - SIDE CUTTING

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

YG MILLING TOOLS

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

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
	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		350	38	○	○	○	○	○	○	
	10	High alloyed steel, and tool steel	200	15	◎	◎	◎	◎	◎	◎	◎
	11		325	35	○	○	○	○	○	○	
M	12	Stainless steel	200	15							
	13		240	23							
	14		180	10							
K	15	Grey cast iron	180	10							
	16		260	26							
	17	Nodular cast iron	160	3							
	18		250	25							
	19	Malleable cast iron	130								
	20		230	21							
N	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										
S	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								
H	38	Hardened steel	550	55							
	39		630	60							
	40	Chilled Cast Iron	400	42							
	41	Hardened Cast Iron	550	55							

E2756	E2751	E2752	E2778	E2777	E2779	E2766	E2767	E2754	E2768
3	Multi Flute	Multi Flute	Multi Flute	Multi Flute	Multi Flute	3	3	Multi Flute	Multi Flute
37°	30°	30°	30°	30°	30°	30°	30°	30°	30°
SQUARE ROUGHING	SQUARE ROUGHING	SQUARE ROUGHING	SQUARE ROUGHING	SQUARE ROUGHING	SQUARE ROUGHING & FINISING	SQUARE ROUGHING & FINISING	SQUARE ROUGHING & FINISING	SQUARE ROUGHING & FINISING	SQUARE ROUGHING & FINISING
D10.0	D6.0	D6.0	D20.0	D14.0	D20.0	D6.0	D6.0	D6.0	D6.0
D30.0	D50.0	D40.0	D50.0	D45.0	D45.0	D40.0	D40.0	D40.0	D45.0
726	727	729	731	732	733	734	735	736	737
SHORT LENGTH	SHORT LENGTH	LONG LENGTH	SHORT LENGTH	SHORT LENGTH	SHORT LENGTH	SHORT LENGTH	LONG LENGTH	SHORT LENGTH	LONG LENGTH
Uncoated	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN
HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8
									
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
○	◎	◎	◎	◎	○	◎	◎	◎	◎
○	◎	◎	◎	◎	○	◎	◎	◎	◎
○	◎	◎	◎	◎	○	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
○	◎	◎	◎	◎	○	◎	◎	◎	◎
○	◎	◎	◎	◎	○	◎	◎	◎	◎
	○	○	○	○		○	○	○	○
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	○	○	○	○		○	○	○	○
◎	○	○	○	○	◎	○	○	○	○
◎	○	○	○	○	◎	○	○	○	○
◎	○	○	○	○	◎	○	○	○	○
◎	○	○	○	○	◎	○	○	○	○
○	○	○	○	○	○	○	○	○	○