

HSSCo8, 2 FLUTE SHORT LENGTH BALL NOSE

- HSSCo8, 2 SCHNEIDEN KURZ STIRNRADIUS
- Fraise HSSCo8, 2 dents, hémisphérique, courte
- 2 TAGLIANTI, SEMISFERICA, SERIE CORTA - HSSCo8



HSS Co8
DIN 327
2
30°
R ±0.02
DIN 1835B
P.742~743

Unit : mm

EDP No.		Radius of Ball Nose	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TiAIN	R (±0.02)		h6		
E2535020	EQ535020	R1.0	2.0	6	4	48
E2535025	EQ535025	R1.25	2.5	6	5	49
E2535030	EQ535030	R1.5	3.0	6	5	49
E2535035	EQ535035	R1.75	3.5	6	6	50
E2535040	EQ535040	R2.0	4.0	6	7	51
E2535045	EQ535045	R2.25	4.5	6	7	51
E2535050	EQ535050	R2.5	5.0	6	8	52
E2535055	EQ535055	R2.75	5.5	6	8	52
E2535060	EQ535060	R3.0	6.0	6	8	52
E2535070	EQ535070	R3.5	7.0	10	10	60
E2535080	EQ535080	R4.0	8.0	10	11	61
E2535090	EQ535090	R4.5	9.0	10	11	61
E2535100	EQ535100	R5.0	10.0	10	13	63
E2535110	EQ535110	R5.5	11.0	12	13	70
E2535120	EQ535120	R6.0	12.0	12	16	73
E2535130	EQ535130	R6.5	13.0	12	16	73
E2535140	EQ535140	R7.0	14.0	12	16	73
E2535150	EQ535150	R7.5	15.0	12	16	73
E2535160	EQ535160	R8.0	16.0	16	19	79
E2535170	EQ535170	R8.5	17.0	16	19	79
E2535180	EQ535180	R9.0	18.0	16	19	79
E2535190	EQ535190	R9.5	19.0	16	19	79
E2535923	EQ535923	R10.0	20.0	16	22	82
E2535200	EQ535200	R10.0	20.0	20	22	88
E2535220	EQ535220	R11.0	22.0	20	22	88
E2535922	EQ535922	R11.0	22.0	25	22	98
E2535240	EQ535240	R12.0	24.0	25	26	102
E2535250	EQ535250	R12.5	25.0	25	26	102
E2535260	EQ535260	R13.0	26.0	25	26	102
E2535280	EQ535280	R14.0	28.0	25	26	102
E2535300	EQ535300	R15.0	30.0	25	26	102
E2535320	EQ535320	R16.0	32.0	32	32	112

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h6

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

◎ : 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	3	25		
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	60	100	75	90	130	110	90	100			15	30	25	38	34	400 Rm	1050 Rm	550	630	400	550
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	○	○	○	○	○																



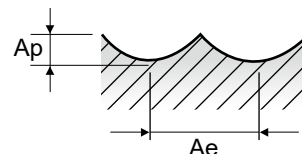
RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

E2535, E2492 SERIES 2 FLUTE BALL NOSE

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)									
						3.0	4.0	6.0	8.0	10.0	12.0	16.0	20.0	25.0	
P	1	Non-alloy steel	0.7D	0.3D	Vc	40	40	40	40	40	40	40	40	40	40
					fz	0.011	0.018	0.031	0.05	0.069	0.085	0.094	0.117	0.13	
					RPM	4244	3183	2122	1592	1273	1061	796	637	509	
	2		Vc	30	30	30	30	30	30	30	30	30	30	30	
			fz	0.01	0.017	0.026	0.044	0.06	0.066	0.083	0.085	0.088			
			RPM	3183	2387	1592	1194	955	796	597	477	382			
	3-4		Vc	20	20	20	20	20	15	20	20	15			
			fz	0.008	0.013	0.023	0.036	0.054	0.061	0.079	0.083	0.091			
			RPM	2122	1592	1061	796	637	398	398	318	191			
	5		Vc	15	15	15	15	15	10	15	15	15			
			fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094			
RPM		1592	1194	796	597	477	265	298	239	191					
6	Vc	30	30	30	30	30	30	30	30	30					
	fz	0.01	0.017	0.026	0.044	0.06	0.066	0.083	0.085	0.088					
	RPM	3183	2387	1592	1194	955	796	597	477	382					
7	Vc	20	20	20	20	20	15	20	20	15					
	fz	0.008	0.013	0.023	0.036	0.054	0.061	0.079	0.083	0.091					
	RPM	2122	1592	1061	796	637	398	398	318	191					
8-9	Vc	15	15	15	15	15	10	15	15	15					
	fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094					
	RPM	1592	1194	796	597	477	265	298	239	191					
10	Vc	30	30	30	30	30	30	30	30	30					
	fz	0.01	0.017	0.026	0.044	0.06	0.066	0.083	0.085	0.088					
	RPM	3183	2387	1592	1194	955	796	597	477	382					
11.1	Vc	15	15	15	15	15	10	15	15	15					
	fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094					
	RPM	1592	1194	796	597	477	265	298	239	191					
N	21-22	Aluminum-wrought alloy	0.7D	0.3D	Vc	105	100	105	100	100	95	100	100	100	
					fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.088	0.096	
					RPM	11141	7958	5570	3979	3183	2520	1989	1592	1273	
23-24	Aluminum-cast, alloyed	0.7D	0.3D	Vc	68	65	68	65	65	62	65	65	65		
				fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.088	0.096		
				RPM	7215	5173	3608	2586	2069	1645	1293	1035	828		

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



SELECTION GUIDE



MILLING TOOLS

HSS

SERIES	E9410	E9720	E3570	E3574
FLUTE	2	Muti Flute	2	4
HELIX ANGLE	≈ 30°	30°	≈ 30°	≈ 30°
CUTTING EDGE SHAPE	SQUARE	SQUARE	SQUARE	SQUARE
SIZE MIN	D3.0	D6.0	D2.5	D2.0
SIZE MAX	D25.0	D30.0	D18.0	D18.0
PAGE	678	679	680	681

CBN END MILLS

i-Xmill END MILLS

i-SMART MODULAR END MILLS

X5070 END MILLS

4G MILL END MILLS

X-POWER PRO END MILLS

TitaNox-POWER END MILLS

JET-POWER END MILLS

V7 PLUS END MILLS

ALU-POWER HPC END MILLS

ALU-POWER END MILLS

D-POWER GRAPHITE END MILLS

D-POWER CFRP END MILLS

ROUTERS

CRX S END MILLS

K-2 END MILLS

ONLY ONE COATED PM60 END MILLS

TANK-POWER END MILLS

GENERAL HSS END MILLS

MILLING CUTTERS

TECHNICAL DATA

HSS GENERAL HSS END MILLS

General Purpose, Non-coated, Any Coating Available

SHORT LENGTH	SHORT LENGTH ROUGHING	SHORT LENGTH	SHORT LENGTH
Uncoated / TiAIN	Uncoated / TiAIN	Uncoated / TiAIN	Uncoated
HSS-PM	HSS-PM	HSS-PM	HSS-PM



Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P 738

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRc					
P	1	Non-alloy steel	About 0.15% C Annealed	125		◎	◎	◎	◎	
	2		About 0.45% C Annealed	190	13	◎	◎	◎	◎	
	3		About 0.45% C Quenched & Tempered	250	25	◎	◎	◎	◎	
	4		About 0.75% C Annealed	270	28	◎	◎	◎	◎	
	5		About 0.75% C Quenched & Tempered	300	32	○	○	○	○	
	6	Low alloy steel	Annealed	180	10	◎	◎	◎	◎	
	7		Quenched & Tempered	275	29	◎	◎	◎	◎	
	8		Quenched & Tempered	300	32	○	○	○	○	
	9		Quenched & Tempered	350	38	○	○	○	○	
	10		High alloyed steel, and tool steel	Annealed	200	15	◎	◎	◎	◎
	11			Quenched & Tempered	325	35	○	○	○	○
M	12	Stainless steel	Ferritic / Martensitic Annealed	200	15					
	13		Martensitic Quenched & Tempered	240	23					
	14		Austenitic	180	10					
K	15	Grey cast iron	Pearlitic / ferritic	180	10					
	16		Pearlitic (Martensitic)	260	26					
	17	Nodular cast iron	Ferritic	160	3					
	18		Pearlitic	250	25					
	19		Ferritic	130						
20	Malleable cast iron	Pearlitic	230	21						
N	21	Aluminum-wrought alloy	Not Curable	60		○	○	○	○	
	22		Curable Hardened	100		○	○	○	○	
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable	75		○	○	○	○	
	24		≤ 12% Si, Curable Hardened	90		○	○	○	○	
	25		> 12% Si, Not Curable	130		○	○	○	○	
	26		Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%	110					
	27	Non Metallic Materials	CuZn, CuSnZn (Brass)	90						
	28		CuSn, lead-free copper and electrolytic copper	100						
	29		Duroplastic, Fiber Reinforced Plastic							
	30	Rubber, Wood, etc.								
S	31	Heat Resistant Super Alloys	Fe Based Annealed	200	15					
	32		Fe Based Cured	280	30					
	33		Ni or Co Based Annealed	250	25					
	34		Ni or Co Based Cured	350	38					
	35	Titanium Alloys	Cast	320	34					
	36	Titanium Alloys	Pure Titanium	400 Rm						
	37		Alpha + Beta Alloys Hardened	1050 Rm						
H	38	Hardened steel	Hardened	550	55					
	39		Hardened	630	60					
	40	Chilled Cast Iron	Cast	400	42					
	41	Hardened Cast Iron	Hardened	550	55					

