



Leading Through Innovation



**HSS**

# **GENERAL HSS END MILLS HSS SCHAFTFRÄSER**

- General Purpose / Coating Available
- Allgemeine Anwendung / Beschichtung verfügbar

SELECTION GUIDE



MILLING TOOLS

SERIES	E2535 EQ535	E2492 EQ492	EL612	E2570 EQ570
FLUTE	2	2	1	2
HELIX ANGLE	30°	30°	≈ 30°	≈ 30°
CUTTING EDGE SHAPE	BALL NOSE	BALL NOSE	SQUARE	SQUARE
SIZE MIN	R1.0	R1.0	D3.0	D1.0
SIZE MAX	R16.0	R15.0	D10.0	D40.0
PAGE	C689	C690	C691	C692

# GENERAL HSS END MILLS

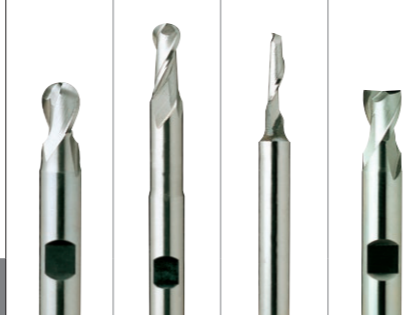
General Purpose, Non-coated, Any Coating Available

Please visit [globalyg1.com/mat](http://globalyg1.com/mat) for material search

◎ : Excellent ○ : Good

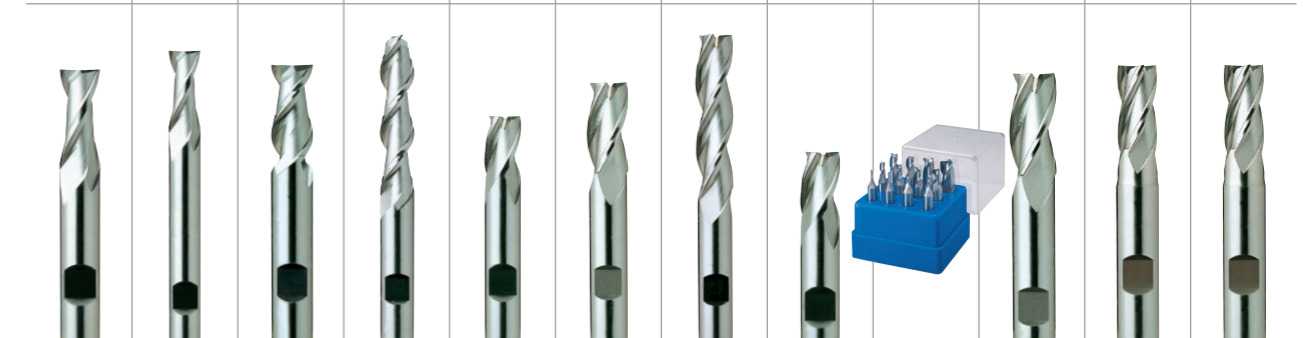
Recommended cutting conditions : p.C719

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRc	E2535 EQ535	E2492 EQ492	EL612	E2570 EQ570
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		Cutting Alloys, PB>1%	110					
	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)	90					
	28		CuSn, lead-free copper and electrolytic copper	100					
	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic						
	30		Rubber, Wood, etc.						
S	31	Heat Resistant Super Alloys	Fe Based Annealed	200	15				
	32		Cured	280	30				
	33		Annealed	250	25				
	34		Ni or Co Based Cured	350	38				
	35		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	Hardened Cast Iron	Cast	400	42				
	41		Hardened	550	55				



E2571 EQ571	E2510 EQ510	E2464	E2509	E2572 EQ572	E2573 EQ573	E2516 EQ516	E2553 EQ553	E2SET553	E2554 EQ554	E2574 EQ574	E2595 EQ595
2	2	2	2	3	3	3	3	3	3	4	4
≈ 30°	30°	42°	42°	≈ 30°	≈ 30°	30°	30°	30°	30°	≈ 30°	≈ 30°
SQUARE	SQUARE	SQUARE	SQUARE	SQUARE	SQUARE	SQUARE	SQUARE	SQUARE	SQUARE	SQUARE	SQUARE
D1.5	D3.0	D1.5	D2.0	D2.0	D1.0	D2.0	D1.0	D2.0	D1.5	D2.0	D2.0
D32.0	D40.0	D30.0	D20.0	D30.0	D40.0	D36.0	D20.0	D10.0	D10.0	D20.0	D25.0
C695	C697	C698	C700	C701	C702	C704	C706	C707	C708	C709	C710

LONG LENGTH	EXTRA LONG LENGTH	SHORT LENGTH	LONG LENGTH	STUB LENGTH	SHORT LENGTH	LONG LENGTH	SHORT LENGTH THROW AWAY	THROW AWAY SET	LONG LENGTH THROW AWAY	SHORT LENGTH	SHORT LENGTH CENTER CUT
Uncoated / TiAlN	Uncoated / TiAlN	Uncoated	Uncoated	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated	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	HSS Co8	HSS Co8



◎	◎	○	○	◎	◎	◎	◎	◎	◎	◎	◎	1
◎	◎	○	○	◎	◎	◎	◎	◎	◎	◎	◎	2
◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	3
◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	4
○	○			◎	◎	◎	◎	◎	◎	◎	◎	5
◎	◎	○	○	◎	◎	◎	◎	◎	◎	◎	◎	6 P
◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	7
○	○			◎	◎	◎	◎	◎	◎	◎	◎	8
○	○			○	○	○	○	○	○	○	○	9
◎	◎	○	○	◎	◎	◎	◎	◎	◎	◎	◎	10
○	○			○	○	○	○	○	○	○	○	11
												12
												13 M
												14
												15
												16
												17 K
												18
												19
												20
○	○	◎	◎	○	○	○	○	○	○	○	○	21
○	○	◎	◎	○	○	○	○	○	○	○	○	22
○	○	◎	◎	○	○	○	○	○	○	○	○	23
○	○	◎	◎	○	○	○	○	○	○	○	○	24
○	○	○	○	○	○	○	○	○	○	○	○	25 N
												26
												27
												28
												29
												30
												31
												32
												33
												34 S
												35
												36
												37
												38
												39
												40 H
												41

SELECTION GUIDE



MILLING TOOLS

SERIES	E2597 EQ597	E2753 EQ753	E2762 EQ762	E2755	E2751 EQ751	E2752 EQ752
FLUTE	4	Multi Flute	Multi Flute	3	Multi Flute	Multi Flute
HELIX ANGLE	≈ 30°	30°	30°	37°	30°	30°
	SQUARE	ROUGHING	ROUGHING	ROUGHING	ROUGHING	ROUGHING
SIZE MIN	D2.0	D6.0	D6.0	D6.0	D6.0	D6.0
SIZE MAX	D20.0	D32.0	D40.0	D25.0	D50.0	D40.0
PAGE	C711	C732	C713	C714	C715	C717

LONG LENGTH CENTER CUT	SHORT LENGTH	LONG LENGTH	SHORT LENGTH	SHORT LENGTH	LONG LENGTH
Uncoated / TiAlN	Uncoated / TiAlN	Uncoated / TiAlN	Uncoated	Uncoated / TiAlN	Uncoated / TiAlN
HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8	HSS Co8

**GENERAL HSS END MILLS**

General Purpose, Non-coated, Any Coating Available

◎ : Excellent ○ : Good

Recommended cutting conditions : p.C739

Please visit [globalyg1.com/mat](http://globalyg1.com/mat) for material search



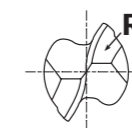
ISO	VDI 3323	Material Description	HB	HRc	E2597 EQ597	E2753 EQ753	E2762 EQ762	E2755	E2751 EQ751	E2752 EQ752
P	1	Non-alloy steel	125		◎	◎	◎	◎	◎	◎
	2		190	13	◎	◎	◎	◎	◎	◎
	3		250	25	◎	◎	◎	○	◎	◎
	4		270	28	◎	◎	◎	○	◎	◎
	5		300	32	◎	◎	◎	○	◎	◎
	6	180	10	◎	◎	◎	◎	◎	◎	
	7	275	29	◎	◎	◎	○	◎	◎	
	8	300	32	◎	◎	◎	○	◎	◎	
	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		130							
20	Malleable cast iron	230	21							
N	21	Aluminum-wrought alloy	60		○	○	○	◎	○	○
	22		100		○	○	○	◎	○	○
	23	Aluminum-cast, alloyed	75		○	○	○	◎	○	○
	24		90		○	○	○	◎	○	○
	25		130		○	○	○	○	○	○
	26		110							
	27	Copper and Copper Alloys (Bronze / Brass)	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						



FLAT SHANK	<b>E2535</b> SERIES
FLAT SHANK	<b>EQ535</b> SERIES

**HSS Co8, 2 FLUTE SHORT LENGTH BALL NOSE**

- HSS Co8, 2 SCHNEIDEN KURZ STIRNRADIUS
- FRAISE HSS Co8, 2 DENTS, HÉMISPHERIQUE, COURTE
- 2 TAGLIENTI, SEMISFERICA, SERIE CORTA - HSS Co8



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

HSS Co8
DIN 327
2
≈ 30°
R ±0.02

DIN 1835B
UNCOATED
TiAlN

p.C719~C720

EDP No.	Radius of Ball Nose R (±0.02)	Mill Diameter	Shank Diameter h6	Length of Cut	Overall Length	
						UNCOATED
E2535020	EQ535020	R1.0	2.0	6	4	48
E2535025	-	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
-	EQ535045	R2.25	4.5	6	7	51
E2535050	EQ535050	R2.5	5.0	6	8	52
E2535055	-	R2.75	5.5	6	8	52
E2535060	EQ535060	R3.0	6.0	6	8	52
E2535070	-	R3.5	7.0	10	10	60
E2535080	EQ535080	R4.0	8.0	10	11	61
E2535090	-	R4.5	9.0	10	11	61
E2535100	EQ535100	R5.0	10.0	10	13	63
E2535110	-	R5.5	11.0	12	13	70
E2535120	EQ535120	R6.0	12.0	12	16	73
E2535130	-	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
E2535180	EQ535180	R9.0	18.0	16	19	79
E2535190	-	R9.5	19.0	16	19	79
E2535923	-	R10.0	20.0	16	22	82
E2535200	EQ535200	R10.0	20.0	20	22	88
E2535220	-	R11.0	22.0	20	22	88
E2535922	-	R11.0	22.0	25	22	98
E2535240	-	R12.0	24.0	25	26	102
E2535250	-	R12.5	25.0	25	26	102
E2535260	-	R13.0	26.0	25	26	102
E2535280	-	R14.0	28.0	25	26	102
E2535300	-	R15.0	30.0	25	26	102
E2535320	-	R16.0	32.0	32	32	112

► Other shank design on your request.

► TiN and TiCN Coatings are available on your request.

◎ : Excellent ○ : Good

ISO	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			
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	38	10	29	32	38	15	35	15	23	10	26	3	25	10	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											
	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			
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
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	15	30	25	38	34	200	260	250	350	320	400 Rm	1050 Rm	550	630	400	550	
HB	60	100	75	90	130	110	90	100			200	260	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

**HSS Co8, 2 FLUTE LONG LENGTH BALL NOSE**

- HSS Co8, 2 SCHNEIDEN LANG STIRNRADIUS
- FRAISE HSS Co8, 2 DENTS, HÉMISPHERIQUE, LONGUE
- 2 TAGLIENTI, SEMISFERICA, SERIE LUNGA - HSS Co8



p.C719~C720

Unit : mm

EDP No.	Radius of Ball Nose		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	UNCOATED	TiAlN				
E2492020	-	-	R1.0	2.0	6	7
E2492030	-	-	R1.5	3.0	6	8
E2492040	-	-	R2.0	4.0	6	11
E2492050	-	-	R2.5	5.0	6	13
E2492060	-	EQ492060	R3.0	6.0	6	13
E2492070	-	-	R3.5	7.0	10	16
E2492080	-	-	R4.0	8.0	10	19
E2492090	-	EQ492090	R4.5	9.0	10	19
E2492100	-	-	R5.0	10.0	10	22
E2492110	-	-	R5.5	11.0	12	22
E2492120	-	-	R6.0	12.0	12	26
E2492130	-	-	R6.5	13.0	12	26
E2492140	-	-	R7.0	14.0	12	26
E2492150	-	-	R7.5	15.0	12	26
E2492160	-	-	R8.0	16.0	16	32
E2492180	-	-	R9.0	18.0	16	32
E2492190	-	-	R9.5	19.0	16	32
E2492200	-	-	R10.0	20.0	20	38
E2492220	-	-	R11.0	22.0	20	38
E2492240	-	-	R12.0	24.0	25	45
E2492250	-	-	R12.5	25.0	25	45
E2492260	-	-	R13.0	26.0	25	45
E2492280	-	-	R14.0	28.0	25	45
E2492300	-	-	R15.0	30.0	25	45

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

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

◎ : 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	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72
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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**HSS-E, 1 FLUTE for ALUMINUM**

- HSS-E, 1 SCHNEIDEN FÜR ALUMINIUM
- FRAISE HSS-E, 1 DENT POUR ALUMINIUM
- 1 TAGLIENTE - HSS-E

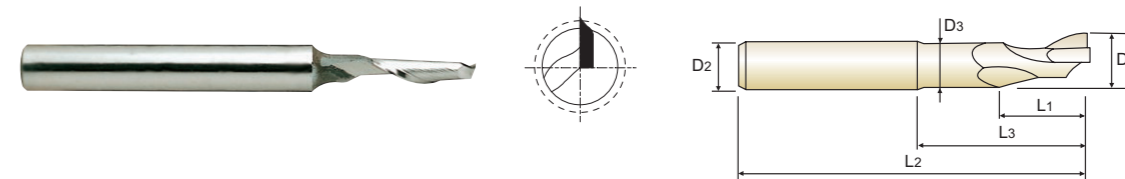
for ALUMINIUM für ALUMINIUM



p.C721

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	js14	h6		
EL612030	3.0	8	12	60
EL612040	4.0	8	12	60
EL612050	5.0	8	12	60
EL612060	6.0	8	14	60
EL612070	7.0	8	14	60
EL612080	8.0	8	14	80
EL612090	9.0	8	14	80
EL612100	10.0	8	14	80



Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter
UNCOATED	D1(js14)	D2(h6)	L1	L3	L2	L2
EL612904	5.0	8	18	35	80	4.8
EL612909	5.0	8	40	-	100	-
EL612932	8.0	8	14	68	120	7.5

**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
js14	±125	±150	±180	±215	±260	±310
h6	0 -6	0 -8	0 -9	0 -11	0 -13	0 -16

◎ : 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	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72
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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2570** SERIES  
FLAT SHANK **EQ570** SERIES

**HSS Co8, 2 FLUTE SHORT LENGTH**

● HSS Co8, 2 SCHNEIDEN KURZ  
○ FRAISE HSS Co8, 2 DENTS, COURTE  
○ 2 TAGLIENTI, SERIE CORTA - HSS Co8



HSS Co8 DIN 327 2  $\approx 30^\circ$   
DIN 1835B UNCOATED TiAlN p.C722~C725

Unit : mm

EDP No.	Mill Diameter	Shank Diameter		Length of Cut	Overall Length
		e8	h6		
E2570010	1.0	6	6	2.5	47
E2570015	1.5	6	6	3	47
E2570020	2.0	6	6	4	48
E2570025	2.5	6	6	5	49
E2570028	2.8	6	6	5	49
E2570030	3.0	6	6	5	49
E2570035	3.5	6	6	6	50
E2570038	3.8	6	6	7	51
E2570040	4.0	6	6	7	51
E2570045	4.5	6	6	7	51
E2570048	4.8	6	6	8	52
E2570050	5.0	6	6	8	52
E2570055	5.5	6	6	8	52
E2570957	5.8	6	6	8	52
E2570060	6.0	6	6	8	52
E2570065	6.5	10	10	10	60
E2570967	6.8	10	10	10	60
E2570070	7.0	10	10	10	60
E2570075	7.5	10	10	10	60
E2570977	7.8	10	10	11	61
E2570080	8.0	10	10	11	61
E2570085	8.5	10	10	11	61
E2570087	8.7	10	10	11	61
E2570090	9.0	10	10	11	61

**Tolerances according to DIN 7160 & 7161**

▶ NEXT PAGE

	Tolerance range in $\mu\text{m}$					
	from 1 to 3	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30	over 30 to 50
e8	-14	-20	-25	-32	-40	-50
h6	0	0	0	0	0	0

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

◎ : Excellent ○ : Good

ISO	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	35	38	42	45	48	52	55	58	60	62	65	68	70	72	74	76
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2570** SERIES  
FLAT SHANK **EQ570** SERIES

**HSS Co8, 2 FLUTE SHORT LENGTH**

● HSS Co8, 2 SCHNEIDEN KURZ  
○ FRAISE HSS Co8, 2 DENTS, COURTE  
○ 2 TAGLIENTI, SERIE CORTA - HSS Co8



HSS Co8 DIN 327 2  $\approx 30^\circ$   
DIN 1835B UNCOATED TiAlN p.C722~C725

Unit : mm

EDP No.	Mill Diameter	Shank Diameter		Length of Cut	Overall Length
		e8	h6		
E2570095	9.5	10	10	11	61
E2570097	9.7	10	10	13	63
E2570100	10.0	10	10	13	63
E2570105	10.5	12	12	13	70
E2570107	10.7	12	12	13	70
E2570110	11.0	12	12	13	70
E2570115	11.5	12	12	13	70
E2570117	11.7	12	12	16	73
E2570120	12.0	12	12	16	73
E2570125	12.5	12	12	16	73
E2570127	12.7	12	12	16	73
E2570130	13.0	12	12	16	73
E2570135	13.5	12	12	16	73
-	EQ570137	13.7	12	16	73
E2570140	14.0	12	12	16	73
E2570147	14.7	12	12	16	73
E2570150	15.0	12	12	16	73
E2570157	15.7	16	16	19	79
E2570160	16.0	16	16	19	79
E2570167	16.7	16	16	19	79
E2570170	17.0	16	16	19	79
-	EQ570177	17.7	16	19	79
E2570180	18.0	16	16	19	79
E2570190	19.0	16	16	19	79

**Tolerances according to DIN 7160 & 7161**

▶ NEXT PAGE

	Tolerance range in $\mu\text{m}$					
	from 1 to 3	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30	over 30 to 50
e8	-14	-20	-25	-32	-40	-50
h6	0	0	0	0	0	0

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

◎ : Excellent ○ : Good

ISO	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	35	38	42	45	48	52	55	58	60	62	65	68	70	72	74	76
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2570** SERIES  
FLAT SHANK **EQ570** SERIES

**HSS Co8, 2 FLUTE SHORT LENGTH**

● HSS Co8, 2 SCHNEIDEN KURZ  
○ FRAISE HSS Co8, 2 DENTS, COURTE  
○ 2 TAGLIENTI, SERIE CORTA - HSS Co8



HSS Co8 DIN 327 2  $\approx 30^\circ$   
DIN 1835B UNCOATED TiAlN p.C722~C725

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	
					UNCOATED
E2570920	EQ570920	20.0	16	22	82
E2570200	EQ570200	20.0	20	22	88
E2570210	-	21.0	20	22	88
E2570220	EQ570220	22.0	20	22	88
-	EQ570922	22.0	25	22	98
E2570240	EQ570240	24.0	25	26	102
E2570250	EQ570250	25.0	25	26	102
E2570260	EQ570260	26.0	25	26	102
E2570270	-	27.0	25	26	102
E2570280	EQ570280	28.0	25	26	102
E2570290	-	29.0	25	26	102
E2570300	EQ570300	30.0	25	26	102
E2570320	EQ570320	32.0	32	32	112
E2570340	EQ570340	34.0	32	32	112
E2570350	-	35.0	32	32	112
E2570360	EQ570360	36.0	32	32	112
E2570380	-	38.0	32	38	118
-	EQ570938	38.0	40	38	130
E2570400	EQ570400	40.0	32	38	118
E2570903	EQ570903	40.0	40	38	130

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

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$					
	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
e8	-14	-20	-25	-32	-40	-50
	-28	-38	-47	-59	-73	-89
h6	0	0	0	0	0	0
	-6	-8	-9	-11	-13	-16

◎ : Excellent ○ : Good

ISO	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
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	75	
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						
	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		
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2571** SERIES  
FLAT SHANK **EQ571** SERIES

**HSS Co8, 2 FLUTE LONG LENGTH**

● HSS Co8, 2 SCHNEIDEN LANG  
○ FRAISE HSS Co8, 2 DENTS, LONGUE  
○ 2 TAGLIENTI, SERIE LUNGA - HSS Co8



HSS Co8 DIN 844 2  $\approx 30^\circ$   
DIN 1835B UNCOATED TiAlN p.C722~C725

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	
					UNCOATED
E2571015	EQ571015	1.5	6	7	51
E2571020	EQ571020	2.0	6	7	51
E2571025	EQ571025	2.5	6	8	52
E2571030	EQ571030	3.0	6	8	52
E2571035	EQ571035	3.5	6	10	54
E2571040	EQ571040	4.0	6	11	55
E2571045	-	4.5	6	11	55
E2571050	EQ571050	5.0	6	13	57
E2571055	EQ571055	5.5	6	13	57
E2571060	EQ571060	6.0	6	13	57
E2571065	EQ571065	6.5	10	16	66
E2571070	-	7.0	10	16	66
E2571075	EQ571075	7.5	10	16	66
E2571080	EQ571080	8.0	10	19	69
E2571085	EQ571085	8.5	10	19	69
E2571090	EQ571090	9.0	10	19	69
E2571095	EQ571095	9.5	10	19	69
E2571100	EQ571100	10.0	10	22	72
E2571110	EQ571110	11.0	12	22	79
E2571120	EQ571120	12.0	12	26	83
-	EQ571130	13.0	12	26	83
E2571140	EQ571140	14.0	12	26	83
E2571150	EQ571150	15.0	12	26	83
E2571160	-	16.0	16	32	92

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$					
	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
e8	-14	-20	-25	-32	-40	-50
	-28	-38	-47	-59	-73	-89
h6	0	0	0	0	0	0
	-6	-8	-9	-11	-13	-16

▶ NEXT PAGE

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

◎ : Excellent ○ : Good

ISO	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
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	75	
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						
	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		
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



**HSS Co8, 2 FLUTE 42° HELIX SHORT LENGTH for ALUMINIUM**

● **HSS Co8, 2 SCHNEIDEN 42° RECHTSSPIRALE KURZ FÜR ALUMINIUM**  
 ○ **FRAISE HSS Co8, 2 DENTS, HÉLICE 42°, POUR ALUMINIUM, COURTE**  
 ○ **2 TAGLIENTI, ELICA 42°, SERIE CORTA - HSS Co8**

for ALUMINIUM  
für ALUMINIUM



HSS Co8 DIN 844 2 42° DIN 1835B UNCOATED p.C721

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	e8	h6		
E2464015	1.5	6	5	49
E2464020	2.0	6	7	51
E2464025	2.5	6	8	52
E2464030	3.0	6	8	52
E2464035	3.5	6	10	54
E2464040	4.0	6	11	55
E2464045	4.5	6	11	55
E2464050	5.0	6	13	57
E2464055	5.5	6	13	57
E2464060	6.0	6	13	57
E2464065	6.5	10	16	66
E2464070	7.0	10	16	66
E2464075	7.5	10	16	66
E2464080	8.0	10	19	69
E2464085	8.5	10	19	69
E2464090	9.0	10	19	69
E2464100	10.0	10	22	72
E2464110	11.0	12	22	79
E2464120	12.0	12	26	83
E2464130	13.0	12	26	83
E2464140	14.0	12	26	83
E2464150	15.0	12	26	83

▶ 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 $\mu\text{m}$						
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
e8	-14 -28	-20 -38	-25 -47	-32 -59	-40 -73	-50 -89
h6	0 -6	0 -8	0 -9	0 -11	0 -13	0 -16

◎ : Excellent ○ : Good

ISO	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			
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	38	40	29	32	38	45	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommend	○	○				○				○											

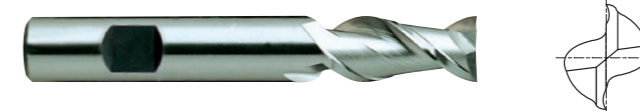
  

ISO	N										S					H						
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		Heat Resistant Super Alloys			Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron		
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend	◎	◎	◎	◎	○																	

**HSS Co8, 2 FLUTE 42° HELIX SHORT LENGTH for ALUMINIUM**

● **HSS Co8, 2 SCHNEIDEN 42° RECHTSSPIRALE KURZ FÜR ALUMINIUM**  
 ○ **FRAISE HSS Co8, 2 DENTS, HÉLICE 42°, POUR ALUMINIUM, COURTE**  
 ○ **2 TAGLIENTI, ELICA 42°, SERIE CORTA - HSS Co8**

for ALUMINIUM  
für ALUMINIUM



HSS Co8 DIN 844 2 42° DIN 1835B UNCOATED p.C721

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	e8	h6		
E2464160	16.0	16	32	92
E2464170	17.0	16	32	92
E2464180	18.0	16	32	92
E2464190	19.0	16	32	92
E2464200	20.0	20	38	104
E2464210	21.0	20	38	104
E2464220	22.0	20	38	104
E2464230	23.0	20	38	104
E2464240	24.0	25	45	121
E2464250	25.0	25	45	121
E2464260	26.0	25	45	121
E2464300	30.0	25	45	121

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

**Tolerances according to DIN 7160 & 7161**

Tolerance range in $\mu\text{m}$						
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
e8	-14 -28	-20 -38	-25 -47	-32 -59	-40 -73	-50 -89
h6	0 -6	0 -8	0 -9	0 -11	0 -13	0 -16

◎ : Excellent ○ : Good

ISO	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			
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	38	40	29	32	38	45	35	15	23	10	10	26	3	25	21	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						
	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		
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend	◎	◎	◎	◎	○																	

**HSS Co8, 2 FLUTE 42° HELIX LONG LENGTH for ALUMINUM**

● **HSS Co8, 2 SCHNEIDEN 42° RECHTSSPIRALE KURZ FÜR ALUMINIUM**  
 ○ **FRAISE HSS Co8, 2 DENTS, HÉLICE 42°, POUR ALUMINIUM, LONGUE**  
 ○ **2 TAGLIENTI, ELICA 42°, SERIE LUNGA - HSS Co8**

for ALUMINIUM  
für ALUMINIUM



Unit : mm

EDP No.	Mill Diameter		Shank Diameter	Length of Cut	Overall Length
	e8	h6			
UNCOATED					
E2509020	2.0	6	10	54	
E2509030	3.0	6	12	56	
E2509040	4.0	6	19	63	
E2509050	5.0	6	24	68	
E2509060	6.0	6	24	68	
E2509070	7.0	10	30	80	
E2509080	8.0	10	38	88	
E2509090	9.0	10	38	88	
E2509100	10.0	10	45	95	
E2509110	11.0	12	45	102	
E2509120	12.0	12	53	110	
E2509130	13.0	12	53	110	
E2509140	14.0	12	53	110	
E2509150	15.0	12	53	110	
E2509160	16.0	16	63	123	
E2509180	18.0	16	63	123	
E2509200	20.0	20	75	141	

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

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$					
	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
e8	-14 -28	-20 -38	-25 -47	-32 -59	-40 -73	-50 -89
h6	0 -6	0 -8	0 -9	0 -11	0 -13	0 -16

◎ : Excellent ○ : Good

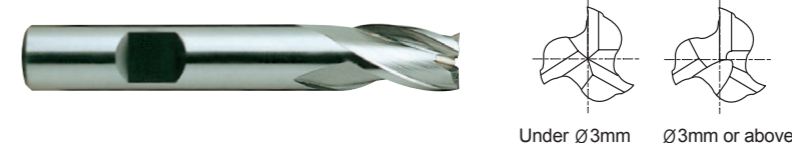
ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	30	29	32	38	35	35	35	23	10	10	26	3	25	21	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						
	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		
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

**HSS Co8, 3 FLUTE STUB LENGTH**

● **HSS Co8, 3 SCHNEIDEN EXTRA KURZ**  
 ○ **FRAISE HSS Co8, 3 DENTS, EXTRA-COURTE**  
 ○ **3 TAGLIENTI. SERIE EXTRA CORTA - HSS Co8**



Unit : mm

EDP No.	Mill Diameter		Shank Diameter	Length of Cut	Overall Length
	UNCOATED	TiAlN			
E2572020	EQ572020	2.0	6	4	48
E2572030	EQ572030	3.0	6	5	49
-	EQ572035	3.5	6	6	50
E2572040	EQ572040	4.0	6	7	51
E2572050	EQ572050	5.0	6	8	52
E2572055	-	5.5	6	8	52
E2572060	EQ572060	6.0	6	8	52
E2572065	EQ572065	6.5	10	10	60
-	EQ572070	7.0	10	10	60
E2572075	-	7.5	10	10	60
E2572080	EQ572080	8.0	10	11	61
E2572085	EQ572085	8.5	10	11	61
E2572100	EQ572100	10.0	10	13	63
E2572120	EQ572120	12.0	12	16	73
-	EQ572140	14.0	12	16	73
E2572150	-	15.0	12	16	73
E2572160	EQ572160	16.0	16	19	79
-	EQ572180	18.0	16	19	79
E2572200	EQ572200	20.0	20	22	88
E2572240	EQ572240	24.0	25	26	102
E2572250	-	25.0	25	26	102
E2572280	-	28.0	25	26	102
E2572300	-	30.0	25	26	102

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

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$					
	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
e8	-14 -28	-20 -38	-25 -47	-32 -59	-40 -73	-50 -89
h6	0 -6	0 -8	0 -9	0 -11	0 -13	0 -16

◎ : Excellent ○ : Good

ISO	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
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	30	29	32	38	35	35	35	23	10	10	26	3	25	21	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommend	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

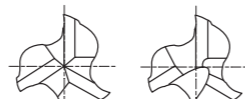
ISO	N										S					H						
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		Heat Resistant Super Alloys			Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron		
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○



FLAT SHANK **E2573** SERIES  
FLAT SHANK **EQ573** SERIES

**HSS Co8, 3 FLUTE SHORT LENGTH**

● **HSS Co8, 3 SCHNEIDEN KURZ**  
○ **FRAISE HSS Co8, 3 DENTS, COURTE**  
○ **3 TAGLIENTI, SERIE CORTA - HSS Co8**



Under  $\varnothing 3\text{mm}$   $\varnothing 3\text{mm}$  or above

HSS Co8 DIN 844 3  $\approx 30^\circ$  DIN 1835B UNCOATED TiAlN p.C726~C733

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TiAlN	e8	h6		
E2573010	EQ573010	1.0	6	3	47
E2573015	EQ573015	1.5	6	7	51
E2573020	EQ573020	2.0	6	7	51
E2573025	EQ573025	2.5	6	8	52
E2573030	EQ573030	3.0	6	8	52
E2573035	EQ573035	3.5	6	10	54
E2573040	EQ573040	4.0	6	11	55
E2573045	EQ573045	4.5	6	11	55
E2573050	EQ573050	5.0	6	13	57
E2573055	EQ573055	5.5	6	13	57
E2573060	EQ573060	6.0	6	13	57
E2573065	EQ573065	6.5	10	16	66
E2573070	EQ573070	7.0	10	16	66
E2573075	EQ573075	7.5	10	16	66
E2573080	EQ573080	8.0	10	19	69
E2573085	EQ573085	8.5	10	19	69
E2573090	EQ573090	9.0	10	19	69
E2573095	-	9.5	10	19	69
E2573100	EQ573100	10.0	10	22	72
E2573120	EQ573120	12.0	12	26	83
E2573140	EQ573140	14.0	12	26	83
E2573150	EQ573150	15.0	12	26	83

▶ 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 $\mu\text{m}$						
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
e8	-14	-20	-25	-32	-40	-50
	-28	-38	-47	-59	-73	-89
h6	0	0	0	0	0	0
	-6	-8	-9	-11	-13	-16

◎ : Excellent ○ : Good

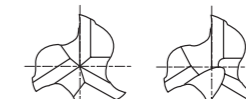
ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2573** SERIES  
FLAT SHANK **EQ573** SERIES

**HSS Co8, 3 FLUTE SHORT LENGTH**

● **HSS Co8, 3 SCHNEIDEN KURZ**  
○ **FRAISE HSS Co8, 3 DENTS, COURTE**  
○ **3 TAGLIENTI, SERIE CORTA - HSS Co8**



Under  $\varnothing 3\text{mm}$   $\varnothing 3\text{mm}$  or above

HSS Co8 DIN 844 3  $\approx 30^\circ$  DIN 1835B UNCOATED TiAlN p.C726~C733

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TiAlN	e8	h6		
E2573160	EQ573160	16.0	16	32	92
E2573180	EQ573180	18.0	16	32	92
E2573200	EQ573200	20.0	20	38	104
E2573220	-	22.0	20	38	104
E2573240	-	24.0	25	45	121
E2573250	EQ573250	25.0	25	45	121
E2573260	EQ573260	26.0	25	45	121
E2573280	EQ573280	28.0	25	45	121
E2573300	EQ573300	30.0	25	45	121
E2573320	EQ573320	32.0	32	53	133
E2573400	EQ573400	40.0	40	63	155

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

**Tolerances according to DIN 7160 & 7161**

Tolerance range in $\mu\text{m}$						
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
e8	-14	-20	-25	-32	-40	-50
	-28	-38	-47	-59	-73	-89
h6	0	0	0	0	0	0
	-6	-8	-9	-11	-13	-16

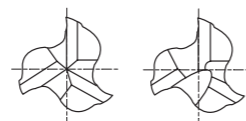
◎ : Excellent ○ : Good

ISO	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		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



**HSS Co8, 3 FLUTE SHORT LENGTH THROW AWAY**

● **HSS Co8, 3 SCHNEIDEN KURZ EINWEGFRÄSER**  
 ○ **FRAISE HSS Co8, 3 DENTS À JETER, COURTE**  
 ○ **3 TAGLIENTI, SERIE CORTA NON RIAFFILABILE - HSS Co8**



Up to Ø10mm Over Ø10mm

HSS Co8
YG STD
3
30°
FLAT
UNCOATED
TiAIN
p.C726~C733

Unit : mm

EDP No.	Mill Diameter	Shank Diameter		Length of Cut	Overall Length
		e8	h6		
<b>E2553010</b>	<b>EQ553010</b>	<b>1.0</b>	<b>6</b>	<b>2</b>	<b>34</b>
<b>E2553013</b>	<b>EQ553013</b>	<b>1.3</b>	<b>6</b>	<b>3</b>	<b>34</b>
<b>E2553015</b>	<b>EQ553015</b>	<b>1.5</b>	<b>6</b>	<b>3</b>	<b>34</b>
<b>E2553018</b>	-	<b>1.8</b>	<b>6</b>	<b>3</b>	<b>34</b>
<b>E2553020</b>	<b>EQ553020</b>	<b>2.0</b>	<b>6</b>	<b>4</b>	<b>35</b>
<b>E2553023</b>	<b>EQ553023</b>	<b>2.3</b>	<b>6</b>	<b>4</b>	<b>35</b>
<b>E2553025</b>	<b>EQ553025</b>	<b>2.5</b>	<b>6</b>	<b>5</b>	<b>36</b>
<b>E2553028</b>	-	<b>2.8</b>	<b>6</b>	<b>5</b>	<b>36</b>
<b>E2553030</b>	<b>EQ553030</b>	<b>3.0</b>	<b>6</b>	<b>5</b>	<b>36</b>
<b>E2553033</b>	<b>EQ553033</b>	<b>3.3</b>	<b>6</b>	<b>6</b>	<b>37</b>
<b>E2553035</b>	-	<b>3.5</b>	<b>6</b>	<b>6</b>	<b>37</b>
<b>E2553038</b>	-	<b>3.8</b>	<b>6</b>	<b>7</b>	<b>38</b>
<b>E2553040</b>	<b>EQ553040</b>	<b>4.0</b>	<b>6</b>	<b>7</b>	<b>38</b>
<b>E2553043</b>	-	<b>4.3</b>	<b>6</b>	<b>7</b>	<b>38</b>
<b>E2553045</b>	-	<b>4.5</b>	<b>6</b>	<b>7</b>	<b>38</b>
<b>E2553048</b>	<b>EQ553048</b>	<b>4.8</b>	<b>6</b>	<b>8</b>	<b>39</b>
<b>E2553050</b>	<b>EQ553050</b>	<b>5.0</b>	<b>6</b>	<b>8</b>	<b>39</b>
<b>E2553053</b>	-	<b>5.3</b>	<b>6</b>	<b>8</b>	<b>39</b>
<b>E2553055</b>	-	<b>5.5</b>	<b>6</b>	<b>8</b>	<b>39</b>
<b>E2553060</b>	<b>EQ553060</b>	<b>6.0</b>	<b>6</b>	<b>8</b>	<b>39</b>
<b>E2553065</b>	<b>EQ553065</b>	<b>6.5</b>	<b>8</b>	<b>10</b>	<b>42</b>
<b>E2553070</b>	<b>EQ553070</b>	<b>7.0</b>	<b>8</b>	<b>10</b>	<b>42</b>

► TiN and TiCN Coatings are available on your request.

► NEXT PAGE

**Tolerances according to DIN 7160 & 7161**

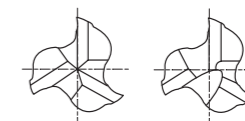
	Tolerance range in $\mu\text{m}$					
	Nominal-Diameter in mm					
	from 1 to 3	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30	over 30 to 50
<b>e8</b>	-14	-20	-25	-32	-40	-50
<b>h6</b>	0	0	0	0	0	0

◎ : Excellent ○ : Good

ISO	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		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	74
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**HSS Co8, 3 FLUTE SHORT LENGTH THROW AWAY**

● **HSS Co8, 3 SCHNEIDEN KURZ EINWEGFRÄSER**  
 ○ **FRAISE HSS Co8, 3 DENTS À JETER, COURTE**  
 ○ **3 TAGLIENTI, SERIE CORTA NON RIAFFILABILE - HSS Co8**



Up to Ø10mm Over Ø10mm

HSS Co8
YG STD
3
30°
FLAT
UNCOATED
TiAIN
p.C726~C733

Unit : mm

EDP No.	Mill Diameter	Shank Diameter		Length of Cut	Overall Length
		e8	h6		
<b>E2553075</b>	<b>EQ553075</b>	<b>7.5</b>	<b>8</b>	<b>10</b>	<b>42</b>
<b>E2553080</b>	-	<b>8.0</b>	<b>8</b>	<b>11</b>	<b>43</b>
<b>E2553085</b>	-	<b>8.5</b>	<b>10</b>	<b>11</b>	<b>48</b>
<b>E2553090</b>	-	<b>9.0</b>	<b>10</b>	<b>11</b>	<b>48</b>
<b>E2553095</b>	-	<b>9.5</b>	<b>10</b>	<b>11</b>	<b>48</b>
<b>E2553100</b>	<b>EQ553100</b>	<b>10.0</b>	<b>10</b>	<b>13</b>	<b>50</b>
<b>E2553120</b>	<b>EQ553120</b>	<b>12.0</b>	<b>12</b>	<b>16</b>	<b>58</b>
<b>E2553160</b>	-	<b>16.0</b>	<b>16</b>	<b>19</b>	<b>64</b>
-	<b>EQ553200</b>	<b>20.0</b>	<b>20</b>	<b>22</b>	<b>78</b>

► TiN and TiCN Coatings are available on your request.

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$					
	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
<b>e8</b>	-14	-20	-25	-32	-40	-50
<b>h6</b>	0	0	0	0	0	0

**SET ORDERING No.:**  
**E2SET553**  
 \* 12PCS. SET  
 SHORT LENGTH  
 - 2PCS. OF EACH SIZE  
 2, 3, 4, 5, 6mm (C3FSC)  
 - 1PC. OF EACH SIZE  
 8, 10mm (C3FSC)

◎ : Excellent ○ : Good

ISO	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		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	74
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2554** SERIES

FLAT SHANK **EQ554** SERIES

**HSS Co8, 3 FLUTE LONG LENGTH THROW AWAY**

- HSS Co8, 3 SCHNEIDEN LANG EINWEGFRÄSER
- FRAISE HSS Co8, 3 DENTS À JETER, LONGUE
- 3 TAGLIENTI, SERIE LUNGA, NON RIAFFILABILE - HSS Co8



HSS Co8 YG STD 3 30° FLAT UNCOATED TiAIN p.C726~C733

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	
					UNCOATED
E2554015	EQ554015	e8	h6	4	35
E2554020	EQ554020	2.0	6	7	38
-	EQ554025	2.5	6	8	39
E2554030	-	3.0	6	8	39
E2554035	EQ554035	3.5	6	10	41
E2554040	EQ554040	4.0	6	11	42
E2554045	EQ554045	4.5	6	11	42
E2554050	EQ554050	5.0	6	13	44
E2554055	-	5.5	6	13	44
E2554060	-	6.0	6	13	44
E2554065	EQ554065	6.5	8	16	48
E2554070	EQ554070	7.0	8	16	48
E2554075	-	7.5	8	16	48
E2554080	-	8.0	8	19	51
E2554085	-	8.5	10	19	56
E2554090	EQ554090	9.0	10	19	56
E2554095	-	9.5	10	19	56
E2554100	-	10.0	10	22	59

▶ TiN and TiCN Coatings are available on your request.

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu$ m					
	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
e8	-14 -28	-20 -38	-25 -47	-32 -59	-40 -73	-50 -89
h6	0 -6	0 -8	0 -9	0 -11	0 -13	0 -16

◎ : Excellent ○ : Good

ISO	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																						
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
HRc	13	25	28	32	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	75	78	80	82	85	88	90	92	95	98	100	102	105	108	110	112	115	118	120	122	125			
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	10	26	160	260	160	250	130	230																					
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2574** SERIES

FLAT SHANK **EQ574** SERIES

**HSS Co8, 4 FLUTE SHORT LENGTH**

- HSS Co8, 4&6 SCHNEIDEN KURZ
- FRAISE HSS Co8, 4&6 DENTS, COURTE
- HSS CO8, 4&6 TAGLIENTI, SERIE CORTA



HSS Co8 DIN 844 4 30° DIN 1835B UNCOATED TiAIN p.C734~C737

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	
						UNCOATED
E2574020	-	2.0	6	7	51	4
E2574025	-	2.5	6	8	52	4
E2574030	EQ574030	3.0	6	8	52	4
E2574040	-	4.0	6	11	55	4
E2574050	-	5.0	6	13	57	4
E2574060	EQ574060	6.0	6	13	57	4
E2574070	-	7.0	10	16	66	4
E2574090	-	9.0	10	19	69	4
E2574100	EQ574100	10.0	10	22	72	4
E2574110	-	11.0	12	22	79	4
E2574120	EQ574120	12.0	12	26	83	4
E2574130	-	13.0	12	26	83	4
E2574140	EQ574140	14.0	12	26	83	4
E2574150	-	15.0	12	26	83	4
E2574160	EQ574160	16.0	16	32	92	4
E2574170	-	17.0	16	32	92	4
E2574180	-	18.0	16	32	92	4
E2574190	-	19.0	16	32	92	4
E2574200	EQ574200	20.0	20	38	104	4

▶ Other shank design on your request.

▶ TiN and TiCN Coatings are available on your request.

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ +0.04	h6

◎ : Excellent ○ : Good

ISO	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																						
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
HRc	13	25	28	32	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72	75	78	80	82	85	88	90	92	95	98	100	102	105	108	110	112	115	118	120	122	125			
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	10	26	160	260	160	250	130	230																					
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2595** SERIES

FLAT SHANK **EQ595** SERIES

**HSS Co8, 4 FLUTE SHORT LENGTH - CENTER CUT**

- HSS Co8, 4&6 SCHNEIDEN KURZ
- FRAISE HSS Co8, 4&6 DENTS, COUPE AU CENTRE, COURTE
- 4 - 6 TAGLIENTI, SERIE CORTA, TAGLIENTE AL CENTRO - HSS Co8



HSS Co8 DIN 844 4 30° DIN 1835B UNCOATED TiAlN p.C742~C745

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	
					UNCOATED
E2595020	EQ595020	2.0	6	7	51
E2595030	EQ595030	3.0	6	8	52
E2595040	EQ595040	4.0	6	11	55
E2595050	EQ595050	5.0	6	13	57
E2595060	EQ595060	6.0	6	13	57
E2595070	EQ595070	7.0	10	16	66
E2595080	EQ595080	8.0	10	19	69
E2595090	EQ595090	9.0	10	19	69
E2595100	EQ595100	10.0	10	22	72
E2595110	EQ595110	11.0	12	22	79
E2595120	EQ595120	12.0	12	26	83
E2595130	EQ595130	13.0	12	26	83
E2595140	EQ595140	14.0	12	26	83
E2595150	EQ595150	15.0	12	26	83
E2595160	EQ595160	16.0	16	32	92
E2595170	EQ595170	17.0	16	32	92
E2595180	EQ595180	18.0	16	32	92
E2595190	EQ595190	19.0	16	32	92
E2595920	EQ595920	20.0	16	38	98
E2595200	EQ595200	20.0	20	38	104
E2595220	EQ595220	22.0	20	38	104
E2595250	EQ595250	25.0	25	45	121

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

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ + 0.04	h6

◎ : 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	30	29	32	38	35	20	15	23	10	180	26	3	25	21	230	
HB	125	190	250	270	300	180	275	300	350	200	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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



FLAT SHANK **E2597** SERIES

FLAT SHANK **EQ597** SERIES

**HSS Co8, 4 FLUTE LONG LENGTH - CENTER CUT**

- HSS Co8, 4&6 SCHNEIDEN LANG
- FRAISE HSS Co8, 4&6 DENTS, COUPE AU CENTRE, LONGUE
- 4&6 TAGLIENTI, SERIE LUNGA, TAGLIENTE AL CENTRO - HSS Co8



HSS Co8 DIN 844 4 30° DIN 1835B UNCOATED TiAlN p.C734~C737

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	
					UNCOATED
E2597020	EQ597020	2.0	6	10	54
E2597025	EQ597025	2.5	6	12	56
E2597030	EQ597030	3.0	6	12	56
E2597035	EQ597035	3.5	6	15	59
E2597040	EQ597040	4.0	6	19	63
E2597045	EQ597045	4.5	6	19	63
E2597050	EQ597050	5.0	6	24	68
E2597055	EQ597055	5.5	6	24	68
E2597060	EQ597060	6.0	6	24	68
E2597070	EQ597070	7.0	10	30	80
E2597080	EQ597080	8.0	10	38	88
E2597090	EQ597090	9.0	10	38	88
E2597100	EQ597100	10.0	10	45	95
E2597110	EQ597110	11.0	12	45	102
E2597120	EQ597120	12.0	12	53	110
-	EQ597130	13.0	12	53	110
E2597140	EQ597140	14.0	12	53	110
E2597150	EQ597150	15.0	12	53	110
E2597160	EQ597160	16.0	16	63	123
E2597170	EQ597170	17.0	16	63	123
E2597180	EQ597180	18.0	16	63	123
E2597190	-	19.0	16	63	123
E2597200	EQ597200	20.0	20	75	141

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

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
up to Ø6	0 ~ + 0.04
over Ø6	0 ~ + 0.05

◎ : Excellent ○ : Good

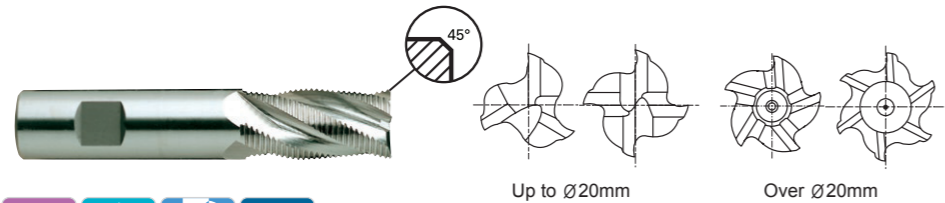
ISO Material Description	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	30	29	32	38	35	20	15	23	10	180	26	3	25	21	230	
HB	125	190	250	270	300	180	275	300	350	200	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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**HSS Co8, MULTI FLUTE SHORT LENGTH ROUGHING - FINE**

- HSS Co8, MULTI SCHNEIDEN KURZ SCHRUPPFRÄSER - FEIN
- FRAISE HSS Co8, MULTI-DENTS ÉBAUCHE, PAS FIN, COURTE
- MULTI TAGLIENTE, PER SGROSSATURA, SERIE CORTA, BOMBATO FINE - HSS Co8



HSS Co8
DIN 844
HR
3-6
30°
DIN 1835B

~Ø20
Ø25~
C x 45°
UNCOATED
TiAIN
p.C738~C741

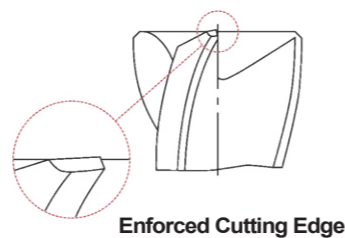
Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
E2753060	6.0	6	13	57	3	0.18
E2753070	7.0	10	16	66	3	0.18
E2753080	8.0	10	19	69	3	0.18
E2753090	9.0	10	19	69	3	0.18
E2753100	10.0	10	22	72	4	0.18
E2753110	11.0	12	22	79	4	0.18
E2753120	12.0	12	26	83	4	0.18
E2753130	13.0	12	26	83	4	0.18
E2753140	14.0	12	26	83	4	0.25
E2753150	15.0	12	26	83	4	0.25
E2753160	16.0	16	32	92	4	0.25
E2753180	18.0	16	32	92	4	0.25
E2753200	20.0	20	38	104	4	0.25
E2753250	25.0	25	45	121	5	0.36
E2753280	28.0	25	45	121	6	0.36
E2753300	30.0	25	45	121	6	0.36
-	32.0	32	53	133	6	0.51

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

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$					
	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



◎ : Excellent ○ : Good

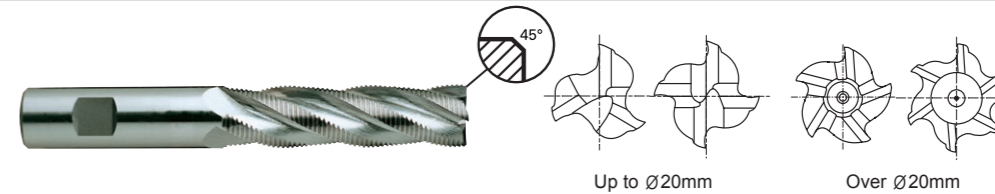
ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	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										
	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	
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**HSS Co8, MULTI FLUTE LONG LENGTH ROUGHING - FINE**

- HSS Co8, MULTI SCHNEIDEN LANG SCHRUPPFRÄSER - FEIN
- FRAISE HSS Co8, MULTI-DENTS ÉBAUCHE, PAS FIN, LONGUE
- MULTI TAGLIENTE, PER SGROSSATURA, SERIE LUNGA, BOMBATO FINE - HSS Co8



HSS Co8
DIN 844
HR
3-6
30°
DIN 1835B

~Ø20
Ø22~
C x 45°
UNCOATED
TiAIN
p.C738~C741

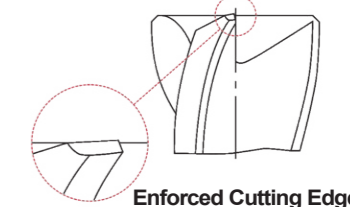
Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
E2762060	6.0	6	24	68	3	0.18
-	7.0	10	30	80	3	0.18
E2762080	8.0	10	38	88	3	0.18
-	9.0	10	38	88	3	0.18
E2762100	10.0	10	45	95	4	0.18
E2762110	11.0	12	45	102	4	0.18
E2762120	12.0	12	53	110	4	0.18
-	13.0	12	53	110	4	0.18
E2762140	14.0	12	53	110	4	0.25
E2762160	16.0	16	63	123	4	0.25
E2762170	17.0	16	63	123	4	0.25
E2762180	18.0	16	63	123	4	0.25
E2762200	20.0	20	75	141	4	0.25
-	22.0	20	75	141	5	0.36
E2762250	25.0	25	90	166	5	0.36
-	28.0	25	90	166	6	0.36
-	30.0	25	90	166	6	0.36
E2762320	32.0	32	106	186	6	0.51
E2762940	40.0	40	125	217	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 $\mu\text{m}$					
	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



◎ : Excellent ○ : Good

ISO	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		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	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										
	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	
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**HSS Co8, 3 FLUTE 37° HELIX SHORT LENGTH ROUGHING for ALUMINUM**

● **HSS Co8, 3 SCHNEIDEN 37° RECHTSSPIRALE KURZ SCHRUPPFRÄSER FÜR ALUMINIUM**  
 ○ **FRAISE HSS Co8, 3 DENTS, ÉBAUCHE POUR ALUMINIUM, HÉLICE 37°, COURTE**  
 ◎ **3 TAGLIENTI, ELICA 37°, PER SGROSSATURA, SERIE CORTA - HSS Co8**

for ALUMINIUM  
für ALUMINIUM



HSS Co8
DIN 844
WR
3
37°
DIN 1835B  
C x 45°
UNCOATED
p.C746~C747

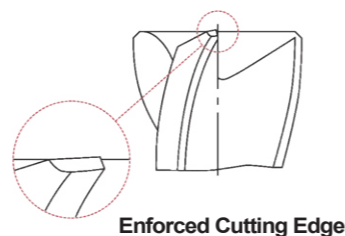
Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	Chamfer
UNCOATED	js12	h6			
E2755060	6.0	6	13	57	0.51
E2755080	8.0	10	19	69	0.51
E2755100	10.0	10	22	72	0.60
E2755120	12.0	12	26	83	0.74
E2755140	14.0	12	26	83	0.94
E2755160	16.0	16	32	92	0.94
E2755180	18.0	16	32	92	0.94
E2755200	20.0	20	38	104	0.94
E2755220	22.0	20	38	104	0.94
E2755250	25.0	25	45	121	0.94

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

**Tolerances according to DIN 7160 & 7161**

		Tolerance range in $\mu\text{m}$					
		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		$\pm 50$	$\pm 60$	$\pm 75$	$\pm 90$	$\pm 105$	$\pm 125$
h6		0 -6	0 -8	0 -9	0 -11	0 -13	0 -16



Enforced Cutting Edge

◎ : Excellent ○ : Good

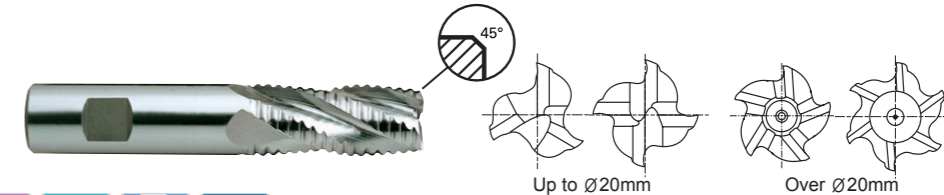
ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	45	15	35	40	48	10	26	3	25	21	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					
	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	
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**HSS Co8, MULTI FLUTE SHORT LENGTH ROUGHING - COARSE**

● **HSS Co8, MULTI SCHNEIDEN KURZ SCHRUPPFRÄSER - GROB**  
 ○ **FRAISE HSS Co8, MULTI-DENTS ÉBAUCHE, PAS GROSSIER, COURTE**  
 ◎ **MULTI TAGLIENTE, PER SGROSSATURA, SERIE CORTA, BOMBATO GROSSO - HSS Co8**



HSS Co8
DIN 844
NR
3-6
30°
DIN 1835B  
~Ø20
Ø22~
C x 45°
UNCOATED
TiAIN
p.C738~C741

Unit : mm

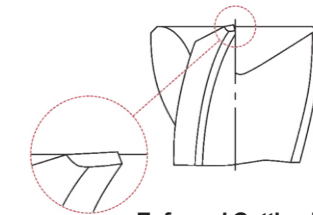
EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer	
							UNCOATED
E2751060	EQ751060	6.0	6	13	57	3	0.25
E2751070	-	7.0	10	16	66	3	0.25
E2751080	EQ751080	8.0	10	19	69	3	0.25
E2751090	EQ751090	9.0	10	19	69	3	0.34
E2751095	-	9.5	10	19	69	3	0.34
E2751100	EQ751100	10.0	10	22	72	4	0.34
E2751110	-	11.0	12	22	79	4	0.50
E2751120	EQ751120	12.0	12	26	83	4	0.50
E2751125	EQ751125	12.5	12	26	83	4	0.50
E2751130	EQ751130	13.0	12	26	83	4	0.50
E2751140	EQ751140	14.0	12	26	83	4	0.55
E2751145	-	14.5	12	26	83	4	0.55
E2751150	-	15.0	12	26	83	4	0.55
E2751160	EQ751160	16.0	16	32	92	4	0.55
E2751170	EQ751170	17.0	16	32	92	4	0.55
E2751180	EQ751180	18.0	16	32	92	4	0.55
E2751190	-	19.0	16	32	92	4	0.55
E2751200	EQ751200	20.0	20	38	104	4	0.55
E2751220	EQ751220	22.0	20	38	104	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 $\mu\text{m}$					
		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		$\pm 50$	$\pm 60$	$\pm 75$	$\pm 90$	$\pm 105$	$\pm 125$
h6		0 -6	0 -8	0 -9	0 -11	0 -13	0 -16



Enforced Cutting Edge

◎ : Excellent ○ : Good

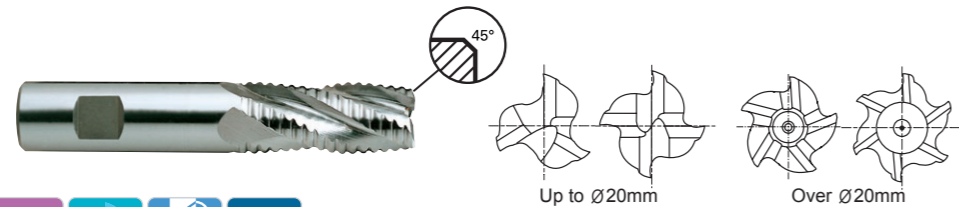
ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	45	15	35	40	48	10	26	3	25	21	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					
	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	
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**HSS Co8, MULTI FLUTE SHORT LENGTH ROUGHING - COARSE**

- HSS Co8, MULTI SCHNEIDEN KURZ SCHRUPPFRÄSER - GROB
- FRAISE HSS Co8, MULTI-DENTS ÉBAUCHE, PAS GROSSIER, COURTE
- MULTI TAGLIENTE, PER SGROSSATURA, SERIE CORTA, BOMBATO GROSSO - HSS Co8



HSS Co8
DIN 844
NR
3-6
30°
DIN 1835B

~Ø20
Ø22~
C x 45°
UNCOATED
TiAIN
p.C738~C741

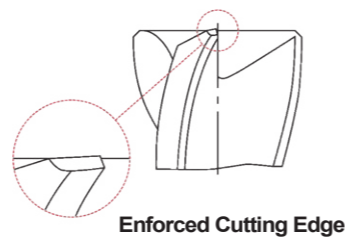
Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer	
							UNCOATED
-	EQ751240	24.0	25	45	121	5	0.55
E2751250	EQ751250	25.0	25	45	121	5	0.55
-	EQ751260	26.0	25	45	121	6	0.55
E2751280	-	28.0	25	45	121	6	0.70
E2751300	EQ751300	30.0	25	45	121	6	0.70
E2751320	EQ751320	32.0	32	53	133	6	0.70
E2751350	-	35.0	32	53	133	6	0.70
E2751360	EQ751360	36.0	32	53	133	6	0.70
E2751400	-	40.0	32	63	155	6	0.88
E2751940	-	40.0	40	63	155	6	0.88
-	EQ751450	45.0	32	63	143	6	0.88
E2751500	-	50.0	50	75	177	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 $\mu\text{m}$					
	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



◎ : Excellent ○ : Good

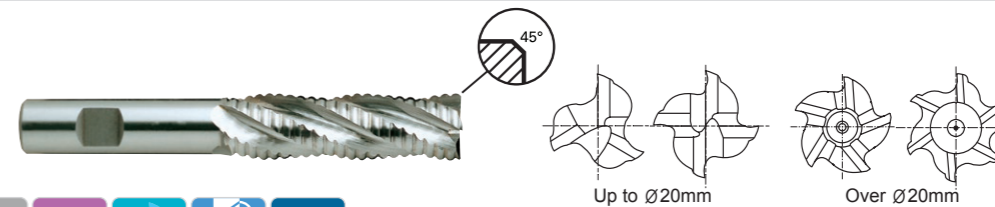
ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72
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										
	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				
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

**HSS Co8, MULTI FLUTE LONG LENGTH ROUGHING - COARSE**

- HSS Co8, MULTI SCHNEIDEN LANG SCHRUPPFRÄSER - GROB
- FRAISE HSS Co8, MULTI-DENTS ÉBAUCHE, PAS GROSSIER, LONGUE
- MULTI TAGLIENTE, PER SGROSSATURA, SERIE LUNGA, BOMBATO GROSSO - HSS Co8



HSS Co8
DIN 844
NR
3-6
30°
DIN 1835B

~Ø20
Ø22~
C x 45°
UNCOATED
TiAIN
p.C738~C741

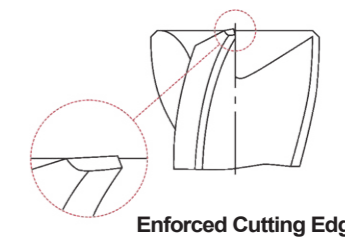
Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer	
							UNCOATED
E2752060	EQ752060	6.0	6	24	68	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	-	11.0	12	45	102	4	0.50
E2752120	EQ752120	12.0	12	53	110	4	0.50
-	EQ752130	13.0	12	53	110	4	0.50
E2752140	-	14.0	12	53	110	4	0.55
E2752160	EQ752160	16.0	16	63	123	4	0.55
E2752180	-	18.0	16	63	123	4	0.55
E2752190	-	19.0	16	63	123	4	0.55
E2752200	EQ752200	20.0	20	75	141	4	0.55
E2752901	-	20.0	16	75	135	4	0.55
E2752902	-	22.0	25	75	151	5	0.55
E2752240	EQ752240	24.0	25	90	166	5	0.55
E2752250	EQ752250	25.0	25	90	166	5	0.55
E2752300	-	30.0	25	90	166	6	0.70
E2752320	EQ752320	32.0	32	106	186	6	0.70

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

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$					
	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



◎ : Excellent ○ : Good

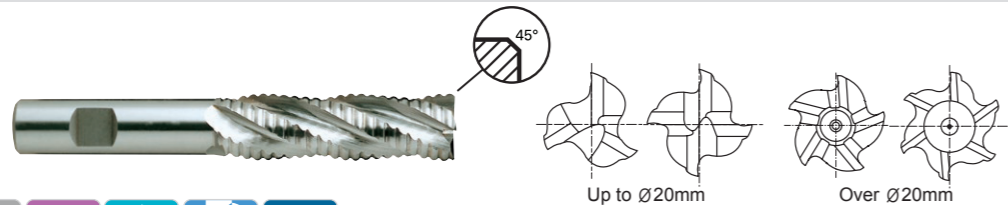
ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron	Nodular cast iron		Malleable cast iron		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72
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										
	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				
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

**HSS Co8, MULTI FLUTE LONG LENGTH ROUGHING - COARSE**

- HSS Co8, MULTI SCHNEIDEN LANG SCHRUPPFRÄSER - GROB
- FRAISE HSS Co8, MULTI-DENTS ÉBAUCHE, PAS GROSSIER, LONGUE
- MULTI TAGLIENTE, PER SGROSSATURA, SERIE LUNGA, BOMBATO GROSSO - HSS Co8

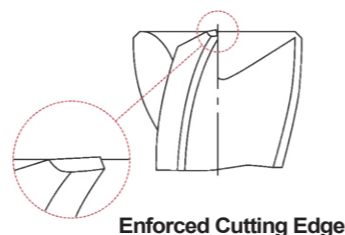


EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
UNCOATED	TiAIN	js12	h6				
<b>E2752360</b>	-	<b>36.0</b>	32	106	186	6	0.70
<b>E2752938</b>	-	<b>38.0</b>	40	125	217	6	0.70
<b>E2752400</b>	-	<b>40.0</b>	32	125	217	6	0.88
<b>E2752940</b>	<b>EQ752940</b>	<b>40.0</b>	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 $\mu\text{m}$					
	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	0	0	0	0	0
	-6	-8	-9	-11	-13	-16



◎ : Excellent ○ : Good

ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloy steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron	
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	
HRc	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
HB																				
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

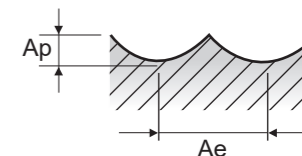
ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)	Non Metallic Materials	Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron					
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
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			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
HB																					
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**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	40
					fz	0.011	0.018	0.031	0.05	0.069	0.085	0.094	0.117	0.13	0.13	0.13
					RPM	4244	3183	2122	1592	1273	1061	796	637	509	509	509
	2		0.7D	0.3D	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	0.088	0.088
					RPM	3183	2387	1592	1194	955	796	597	477	382	382	382
	3-4		0.7D	0.3D	Vc	20	20	20	20	20	15	20	20	20	15	15
					fz	0.008	0.013	0.023	0.036	0.054	0.061	0.079	0.083	0.091	0.091	0.091
					RPM	2122	1592	1061	796	637	398	398	318	318	191	191
	5		0.7D	0.3D	Vc	15	15	15	15	15	10	15	15	15	15	15
					fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094	0.094	0.094
RPM		1592			1194	796	597	477	265	298	239	191	191	191		
6	0.7D	0.3D	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	0.088	0.088		
			RPM	3183	2387	1592	1194	955	796	597	477	382	382	382		
7	0.7D	0.3D	Vc	20	20	20	20	20	15	20	20	20	15	15		
			fz	0.008	0.013	0.023	0.036	0.054	0.061	0.079	0.083	0.091	0.091	0.091		
			RPM	2122	1592	1061	796	637	398	398	318	318	191	191		
8-9	0.7D	0.3D	Vc	15	15	15	15	15	10	15	15	15	15	15		
			fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094	0.094	0.094		
			RPM	1592	1194	796	597	477	265	298	239	191	191	191		
10	0.7D	0.3D	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	0.088	0.088		
			RPM	3183	2387	1592	1194	955	796	597	477	382	382	382		
11.1	0.7D	0.3D	Vc	15	15	15	15	15	10	15	15	15	15	15		
			fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094	0.094	0.094		
			RPM	1592	1194	796	597	477	265	298	239	191	191	191		
N	21-22	Aluminum-wrought alloy	0.7D	0.3D	Vc	105	100	105	100	100	95	100	100	100	100	
					fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.088	0.096	0.096	0.096
					RPM	11141	7958	5570	3979	3183	2520	1989	1592	1273	1273	1273
23-24	Aluminum-cast, alloyed	0.7D	0.3D	Vc	68	65	68	65	65	62	65	65	65	65		
				fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.088	0.096	0.096	0.096	
				RPM	7215	5173	3608	2586	2069	1645	1293	1035	828	828	828	

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

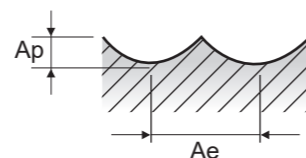


**EQ535, EQ492 SERIES 2 FLUTE BALL NOSE TIAN COATED**

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	60	55	60	55	55	55	55	55	55	55	55
					fz	0.011	0.018	0.031	0.05	0.069	0.086	0.095	0.115	0.129		
					RPM	6366	4377	3183	2188	1751	1459	1094	875	700		
	2		Vc	45	40	45	45	45	45	45	45	45	45	45		
			fz	0.011	0.016	0.026	0.043	0.061	0.066	0.082	0.086	0.091				
			RPM	4775	3183	2387	1790	1432	1061	895	716	573				
	3-4		Vc	25	25	25	25	25	25	25	25	25	25	25		
			fz	0.007	0.013	0.023	0.035	0.053	0.058	0.075	0.088	0.092				
			RPM	2653	1989	1326	995	796	663	497	398	318				
	5		Vc	20	20	20	20	15	15	20	20	15				
			fz	0.008	0.013	0.018	0.029	0.045	0.056	0.071	0.083	0.1				
RPM		2122	1592	1061	796	477	398	318	191	191						
6	Vc	45	40	45	45	45	45	45	45	45	45					
	fz	0.011	0.016	0.026	0.043	0.061	0.066	0.082	0.086	0.091						
	RPM	4775	3183	2387	1790	1432	1061	895	716	573						
7	Vc	25	25	25	25	25	25	25	25	25	25					
	fz	0.007	0.013	0.023	0.035	0.053	0.058	0.075	0.088	0.092						
	RPM	2653	1989	1326	995	796	663	497	398	318						
8-9	Vc	20	20	20	20	15	15	20	20	15						
	fz	0.008	0.013	0.018	0.029	0.045	0.056	0.071	0.083	0.1						
	RPM	2122	1592	1061	796	477	398	318	191	191						
10	Vc	45	40	45	45	45	45	45	45	45						
	fz	0.011	0.016	0.026	0.043	0.061	0.066	0.082	0.086	0.091						
	RPM	4775	3183	2387	1790	1432	1061	895	716	573						
11.1	Vc	20	20	20	20	15	15	20	20	15						
	fz	0.008	0.013	0.018	0.029	0.045	0.056	0.071	0.083	0.1						
	RPM	2122	1592	1061	796	477	398	318	191	191						
N	21-22	Aluminum-wrought alloy	0.7D	0.3D	Vc	145	140	150	140	140	140	140	140			
					fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.087	0.097		
					RPM	15385	11141	7958	5570	4456	3448	2785	2228	1783		
23-24	Aluminum-cast, alloyed	0.7D	0.3D	Vc	94	91	98	91	91	91	91	91				
				fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.087	0.097			
				RPM	9974	7242	5199	3621	2897	2255	1810	1448	1159			

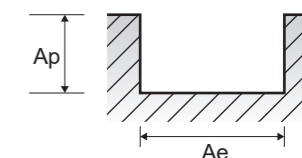
※The FEED, in long & extra long types, should be reduced by around 50%



**EL612 SERIES 1 FLUTE - SLOTTING**

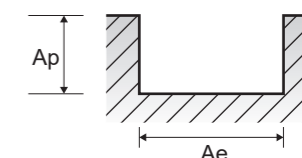
Vc = m/min.  
fz = mm/tooth  
RPM = rev/min.  
FEED = mm/min.

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)						
						3.0	4.0	5.0	6.0	7.0	8.0	10.0
N	21-22	Aluminum-wrought alloy	1.0D	0.5D (~Ø:0.2D)	Vc	188	226	220	207	220	214	220
					fz	0.055	0.053	0.054	0.055	0.055	0.053	0.054
					RPM	19947	17985	14006	10982	10004	8515	7003
	23-24	Aluminum-cast, alloyed	1.0D	0.5D (~Ø:0.2D)	Vc	122	147	143	135	143	139	143
					fz	0.055	0.053	0.054	0.055	0.055	0.053	0.054
					RPM	12945	11698	9104	7162	6503	5531	4552



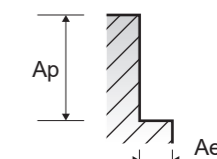
**E2464, E2509 SERIES 2 FLUTE - SLOTTING**

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)									
						3.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	
N	21-22	Aluminum-wrought alloy	1.0D	0.5D	Vc	75	130	150	155	190	155	175	130	145	
					fz	0.035	0.05	0.071	0.12	0.12	0.177	0.177	0.283	0.283	
					RPM	7958	6897	5968	4934	5040	3524	3482	2299	2308	
	23-24	Aluminum-cast, alloyed	1.0D	0.5D	Vc	49	85	98	101	124	101	114	85	94	
					fz	0.035	0.05	0.071	0.12	0.12	0.177	0.177	0.283	0.283	
					RPM	5199	4509	3899	3215	3289	2296	2268	1503	1496	



**E2464, E2509 SERIES 2 FLUTE - SITE CUTTING**

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)									
						3.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	
N	21-22	Aluminum-wrought alloy	Ø3~Ø10-0.25D Ø12~Ø20-0.5D	1.0D	Vc	75	130	150	155	190	155	175	130	145	
					fz	0.046	0.064	0.092	0.15	0.15	0.229	0.229	0.37	0.37	
					RPM	7958	6897	5968	4934	5040	3524	3482	2299	2308	
	23-24	Aluminum-cast, alloyed	Ø3~Ø10-0.25D Ø12~Ø20-0.5D	1.0D	Vc	49	85	98	101	124	101	114	85	94	
					fz	0.046	0.064	0.092	0.15	0.15	0.229	0.229	0.37	0.37	
					RPM	5199	4509	3899	3215	3289	2296	2268	1503	1496	



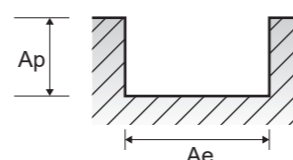
**E2570, E2571, E2510 SERIES 2 FLUTE - SLOTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)							
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0
P	1	Non-alloy steel	1.0D	0.5D	Vc	35	35	35	35	35	35	35	35
					fz	0.004	0.008	0.013	0.02	0.025	0.036	0.045	0.061
					RPM	5570	3714	2785	2228	1857	1393	1114	928
	2		1.0D	0.5D	Vc	30	30	30	30	30	30	30	30
					fz	0.003	0.007	0.013	0.019	0.025	0.041	0.05	0.063
					RPM	4775	3183	2387	1910	1592	1194	955	796
	3-4		1.0D	0.5D	Vc	25	25	25	25	25	25	25	25
					fz	0.004	0.008	0.013	0.019	0.025	0.039	0.05	0.063
					RPM	3979	2653	1989	1592	1326	995	796	663
	5		1.0D	0.5D	Vc	15	15	15	15	15	15	15	15
					fz	0.003	0.006	0.014	0.019	0.025	0.04	0.05	0.063
RPM		2387			1592	1194	955	796	597	477	398		
6	1.0D	0.5D	Vc	30	30	30	30	30	30	30	30		
			fz	0.003	0.007	0.013	0.019	0.025	0.041	0.05	0.063		
			RPM	4775	3183	2387	1910	1592	1194	955	796		
7	1.0D	0.5D	Vc	25	25	25	25	25	25	25	25		
			fz	0.004	0.008	0.013	0.019	0.025	0.039	0.05	0.063		
			RPM	3979	2653	1989	1592	1326	995	796	663		
8-9	1.0D	0.5D	Vc	15	15	15	15	15	15	15	15		
			fz	0.003	0.006	0.014	0.019	0.025	0.04	0.05	0.063		
			RPM	2387	1592	1194	955	796	597	477	398		
10	1.0D	0.5D	Vc	30	30	30	30	30	30	30	30		
			fz	0.003	0.007	0.013	0.019	0.025	0.041	0.05	0.063		
			RPM	4775	3183	2387	1910	1592	1194	955	796		
11.1	1.0D	0.5D	Vc	15	15	15	15	15	15	15	15		
			fz	0.003	0.006	0.014	0.019	0.025	0.04	0.05	0.063		
			RPM	2387	1592	1194	955	796	597	477	398		
N	21-22	Aluminum-wrought alloy	1.0D	0.5D	Vc	75	105	100	100	105	100	95	95
					fz	0.007	0.011	0.018	0.025	0.028	0.049	0.065	0.076
					RPM	11937	11141	7958	6366	5570	3979	3024	2520
23-24	Aluminum-cast, alloyed	1.0D	0.5D	Vc	49	68	65	65	68	65	62	62	
				fz	0.007	0.011	0.018	0.025	0.028	0.049	0.065	0.076	
				RPM	7799	7215	5173	4138	3608	2586	1974	1645	
FEED	109	159	186	207	202	253	257	250					

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

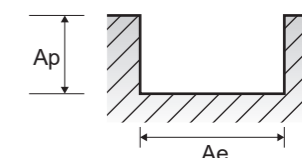
▶ NEXT PAGE



**E2570, E2571, E2510 SERIES 2 FLUTE - SLOTTING**

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

VDI 3323	Parameter	Diameter (Ø)										
		14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	36.0	40.0
1	Vc	35	35	35	35	35	35	35	35	35	35	35
	fz	0.069	0.079	0.079	0.089	0.1	0.1	0.1	0.1	0.1	0.097	0.107
	RPM	796	696	619	557	506	446	398	371	348	309	279
2	Vc	30	30	30	30	30	30	30	30	30	30	30
	fz	0.064	0.08	0.09	0.1	0.1	0.1	0.1	0.097	0.098	0.1	0.114
	RPM	682	597	531	477	434	382	341	318	298	265	239
3-4	Vc	25	25	25	25	25	25	25	25	25	25	25
	fz	0.071	0.078	0.088	0.088	0.1	0.097	0.098	0.1	0.102	0.1	0.111
	RPM	568	497	442	398	362	318	284	265	199	221	199
5	Vc	15	15	15	15	15	15	15	15	15	15	15
	fz	0.071	0.08	0.09	0.102	0.102	0.097	0.094	0.094	0.107	0.104	0.114
	RPM	341	298	265	239	217	191	171	159	149	133	119
6	Vc	30	30	30	30	30	30	30	30	30	30	30
	fz	0.064	0.08	0.09	0.1	0.1	0.1	0.1	0.097	0.098	0.1	0.114
	RPM	682	597	531	477	434	382	341	318	298	265	239
7	Vc	25	25	25	25	25	25	25	25	25	25	25
	fz	0.071	0.078	0.088	0.088	0.1	0.097	0.098	0.1	0.102	0.1	0.111
	RPM	568	497	442	398	362	318	284	265	199	221	199
8-9	Vc	15	15	15	15	15	15	15	15	15	15	15
	fz	0.071	0.08	0.09	0.102	0.102	0.097	0.094	0.094	0.107	0.104	0.114
	RPM	341	298	265	239	217	191	171	159	149	133	119
10	Vc	30	30	30	30	30	30	30	30	30	30	30
	fz	0.064	0.08	0.09	0.1	0.1	0.1	0.1	0.097	0.098	0.1	0.114
	RPM	682	597	531	477	434	382	341	318	298	265	239
11.1	Vc	15	15	15	15	15	15	15	15	15	15	15
	fz	0.071	0.08	0.09	0.102	0.102	0.097	0.094	0.094	0.107	0.104	0.114
	RPM	341	298	265	239	217	191	171	159	149	133	119
21-22	Vc	95	100	100	100	95	95	95	95	105	100	100
	fz	0.08	0.088	0.097	0.1	0.107	0.117	0.123	0.123	0.12	0.122	0.125
	RPM	2160	1989	1768	1592	1375	1210	1080	1114	995	884	796
23-24	Vc	62	65	65	65	62	62	62	62	68	65	65
	fz	0.08	0.088	0.097	0.1	0.107	0.117	0.123	0.123	0.12	0.122	0.125
	RPM	1410	1293	1149	1035	897	789	705	722	647	575	517
FEED	226	228	223	207	192	185	173	177	155	140	129	



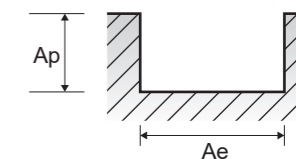
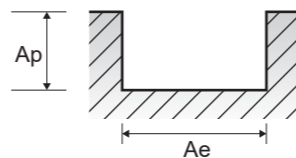
**EQ570, EQ571, EQ510 SERIES 2 FLUTE TIALN COATED - SLOTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)							
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0
P	1	Non-alloy steel	1.0D	0.5D	Vc	50	45	50	50	45	50	50	45
					fz	0.004	0.008	0.013	0.02	0.025	0.036	0.045	0.062
					RPM	7958	4775	3979	3183	2387	1989	1592	1194
	2		Vc	40	40	40	40	40	40	40	40		
			fz	0.003	0.007	0.012	0.02	0.024	0.04	0.05	0.064		
			RPM	6366	4244	3183	2546	2122	1592	1273	1061		
	3-4		Vc	35	35	30	35	30	30	35	35		
			fz	0.004	0.008	0.013	0.019	0.025	0.04	0.05	0.061		
			RPM	5570	3714	2387	2228	1592	1194	1114	928		
	5		Vc	20	20	20	20	20	20	20	20		
			fz	0.003	0.007	0.013	0.02	0.025	0.041	0.05	0.064		
RPM		3183	2122	1592	1273	1061	796	637	531				
6	Vc	40	40	40	40	40	40	40	40				
	fz	0.003	0.007	0.012	0.02	0.024	0.04	0.05	0.064				
	RPM	6366	4244	3183	2546	2122	1592	1273	1061				
7	Vc	35	35	30	35	30	30	35	35				
	fz	0.004	0.008	0.013	0.019	0.025	0.04	0.05	0.061				
	RPM	5570	3714	2387	2228	1592	1194	1114	928				
8-9	Vc	20	20	20	20	20	20	20	20				
	fz	0.003	0.007	0.013	0.02	0.025	0.041	0.05	0.064				
	RPM	3183	2122	1592	1273	1061	796	637	531				
10	Vc	40	40	40	40	40	40	40	40				
	fz	0.003	0.007	0.012	0.02	0.024	0.04	0.05	0.064				
	RPM	6366	4244	3183	2546	2122	1592	1273	1061				
11.1	Vc	20	20	20	20	20	20	20	20				
	fz	0.003	0.007	0.013	0.02	0.025	0.041	0.05	0.064				
	RPM	3183	2122	1592	1273	1061	796	637	531				
N	21-22	Aluminum-wrought alloy	1.0D	0.5D	Vc	105	145	140	140	150	140	135	130
					fz	0.007	0.011	0.018	0.025	0.028	0.049	0.064	0.076
					RPM	16711	15385	11141	8913	7958	5570	4297	3448
23-24	Aluminum-cast, alloyed	1.0D	0.5D	Vc	68	94	91	91	98	91	88	85	
				fz	0.007	0.011	0.018	0.025	0.028	0.049	0.064	0.076	
				RPM	10823	9974	7242	5793	5199	3621	2801	2255	

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

▶ NEXT PAGE



**EQ570, EQ571, EQ510 SERIES 2 FLUTE TIALN COATED - SLOTTING**

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

VDI 3323	Parameter	Diameter (Ø)										
		14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	36.0	40.0
1	Vc	50	50	50	50	50	50	50	45	50	50	50
	fz	0.07	0.078	0.078	0.088	0.1	0.096	0.1	0.1	0.1	0.094	0.106
	RPM	1137	995	884	796	723	637	568	477	442	398	318
2	Vc	45	40	40	40	45	45	45	40	40	40	40
	fz	0.063	0.078	0.089	0.096	0.096	0.1	0.1	0.094	0.094	0.1	0.117
	RPM	1023	796	707	637	651	573	512	424	398	354	318
3-4	Vc	35	35	30	35	35	35	35	30	35	30	30
	fz	0.069	0.077	0.091	0.091	0.1	0.094	0.094	0.1	0.108	0.092	0.11
	RPM	796	696	531	557	506	446	398	371	298	309	239
5	Vc	20	20	20	20	20	20	20	20	20	15	20
	fz	0.07	0.081	0.093	0.108	0.108	0.1	0.1	0.1	0.1	0.117	0.117
	RPM	455	398	354	318	289	255	227	199	133	159	159
6	Vc	45	40	40	40	45	45	45	40	40	40	40
	fz	0.063	0.078	0.089	0.096	0.096	0.1	0.1	0.094	0.094	0.1	0.117
	RPM	1023	796	707	637	651	573	512	424	398	354	318
7	Vc	35	35	30	35	35	35	35	30	35	35	30
	fz	0.069	0.077	0.091	0.091	0.1	0.094	0.094	0.1	0.108	0.092	0.11
	RPM	796	696	531	557	506	446	398	371	298	309	239
8-9	Vc	20	20	20	20	20	20	20	20	20	15	20
	fz	0.07	0.081	0.093	0.108	0.108	0.1	0.1	0.1	0.1	0.117	0.117
	RPM	455	398	354	318	289	255	227	199	133	159	159
10	Vc	45	40	40	40	45	45	45	40	40	40	40
	fz	0.063	0.078	0.089	0.096	0.096	0.1	0.1	0.094	0.094	0.1	0.117
	RPM	1023	796	707	637	651	573	512	424	398	354	318
11.1	Vc	20	20	20	20	20	20	20	20	20	15	20
	fz	0.07	0.081	0.093	0.108	0.108	0.1	0.1	0.1	0.1	0.117	0.117
	RPM	455	398	354	318	289	255	227	199	133	159	159
21-22	Vc	135	140	140	140	135	135	135	145	140	140	140
	fz	0.079	0.088	0.098	0.1	0.108	0.115	0.123	0.123	0.12	0.124	0.127
	RPM	3069	2785	2476	2228	1953	1719	1535	1538	1393	1238	1114
23-24	Vc	88	91	91	91	88	88	88	94	91	91	91
	fz	0.079	0.088	0.098	0.1	0.108	0.115	0.123	0.123	0.12	0.124	0.127
	RPM	2001	1810	1609	1448	1273	1120	1000	997	905	805	724

**E2572, E2573, E2516, E2553, E2554** SERIES

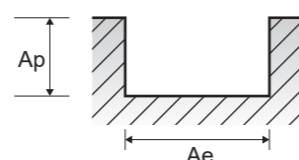
**3 FLUTE - SLOTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)							
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0
P	1	Non-alloy steel	1.0D	0.5D	Vc	35	35	35	35	35	35	35	35
					fz	0.002	0.005	0.007	0.012	0.015	0.021	0.027	0.037
					RPM	5570	3714	2785	2228	1857	1393	1114	928
	2		Vc	30	30	30	30	30	30	30	30		
			fz	0.002	0.004	0.007	0.01	0.014	0.021	0.026	0.033		
			RPM	4775	3183	2387	1910	1592	1194	955	796		
	3-4		Vc	25	25	25	25	25	25	25	25		
			fz	0.002	0.003	0.006	0.008	0.011	0.019	0.023	0.029		
			RPM	3979	2653	1989	1592	1326	995	796	663		
	5		Vc	15	15	15	15	15	15	15	15		
			fz	0.002	0.003	0.006	0.007	0.01	0.018	0.022	0.029		
RPM		2387	1592	1194	955	796	597	477	398				
6	Vc	30	30	30	30	30	30	30	30				
	fz	0.002	0.004	0.007	0.01	0.014	0.021	0.026	0.033				
	RPM	4775	3183	2387	1910	1592	1194	955	796				
7	Vc	25	25	25	25	25	25	25	25				
	fz	0.002	0.003	0.006	0.008	0.011	0.019	0.023	0.029				
	RPM	3979	2653	1989	1592	1326	995	796	663				
8-9	Vc	15	15	15	15	15	15	15	15				
	fz	0.002	0.003	0.006	0.007	0.01	0.018	0.022	0.029				
	RPM	2387	1592	1194	955	796	597	477	398				
10	Vc	30	30	30	30	30	30	30	30				
	fz	0.002	0.004	0.007	0.01	0.014	0.021	0.026	0.033				
	RPM	4775	3183	2387	1910	1592	1194	955	796				
11.1	Vc	15	15	15	15	15	15	15	15				
	fz	0.002	0.003	0.006	0.007	0.01	0.018	0.022	0.029				
	RPM	2387	1592	1194	955	796	597	477	398				
N	21-22	Aluminum-wrought alloy	1.0D	0.5D	Vc	75	105	100	100	105	100	95	95
					fz	0.003	0.005	0.008	0.011	0.013	0.022	0.029	0.035
	RPM				11937	11141	7958	6366	5570	3979	3024	2520	
23-24	Aluminum-cast, alloyed	Vc	49	68	65	65	68	65	62	62			
		fz	0.003	0.005	0.008	0.011	0.013	0.022	0.029	0.035			
		RPM	7799	7215	5173	4138	3608	2586	1974	1645			
FEED	70	108	124	137	141	171	172	173					

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

▶ NEXT PAGE

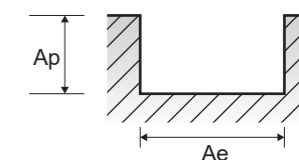


**E2572, E2573, E2516, E2553, E2554** SERIES

**3 FLUTE - SLOTTING**

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

VDI 3323	Parameter	Diameter (Ø)											
		14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	35.0	36.0	40.0
1	Vc	35	35	35	35	35	35	35	35	35	35	35	35
	fz	0.042	0.048	0.048	0.054	0.06	0.059	0.058	0.057	0.057	0.057	0.059	0.065
	RPM	796	696	619	557	506	446	398	371	348	318	309	279
2	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.033	0.042	0.047	0.052	0.052	0.054	0.052	0.054	0.054	0.051	0.053	0.061
	RPM	682	597	531	477	434	382	341	318	298	273	265	239
3-4	Vc	25	25	25	25	25	25	25	25	25	25	25	25
	fz	0.033	0.037	0.042	0.042	0.048	0.043	0.042	0.04	0.045	0.04	0.042	0.046
	RPM	568	497	442	398	362	318	284	265	199	227	221	199
5	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.033	0.036	0.04	0.045	0.045	0.037	0.042	0.042	0.048	0.038	0.042	0.045
	RPM	341	298	265	239	217	191	171	159	149	136	133	119
6	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.033	0.042	0.047	0.052	0.052	0.054	0.052	0.054	0.054	0.051	0.053	0.061
	RPM	682	597	531	477	434	382	341	318	298	273	265	239
7	Vc	25	25	25	25	25	25	25	25	25	25	25	25
	fz	0.033	0.037	0.042	0.042	0.048	0.043	0.042	0.04	0.045	0.04	0.042	0.046
	RPM	568	497	442	398	362	318	284	265	199	227	221	199
8-9	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.033	0.036	0.04	0.045	0.045	0.037	0.042	0.042	0.048	0.038	0.042	0.045
	RPM	341	298	265	239	217	191	171	159	149	136	133	119
10	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.033	0.042	0.047	0.052	0.052	0.054	0.052	0.054	0.054	0.051	0.053	0.061
	RPM	682	597	531	477	434	382	341	318	298	273	265	239
11.1	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.033	0.036	0.04	0.045	0.045	0.037	0.042	0.042	0.048	0.038	0.042	0.045
	RPM	341	298	265	239	217	191	171	159	149	136	133	119
21-22	Vc	95	100	100	100	95	95	95	95	105	100	100	100
	fz	0.036	0.04	0.044	0.046	0.048	0.053	0.055	0.055	0.053	0.053	0.056	0.054
	RPM	2160	1989	1768	1592	1375	1210	1080	1114	995	955	884	796
23-24	Vc	62	65	65	65	62	62	62	62	68	65	65	65
	fz	0.036	0.04	0.044	0.046	0.048	0.053	0.055	0.055	0.053	0.053	0.056	0.054
	RPM	1410	1293	1149	1035	897	789	705	722	647	618	575	517
FEED	152	155	152	143	129	126	116	119	103	98	97	84	



**E2572, E2573, E2516, E2553, E2554 SERIES**

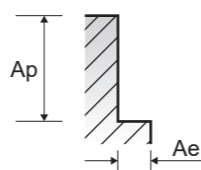
**3 FLUTE - SIDE CUTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)								
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	
P	1	Non-alloy steel	0.1D	1.5D	Vc	35	35	35	35	35	35	35	35	35
					fz	0.004	0.008	0.013	0.02	0.025	0.036	0.045	0.061	
					RPM	5570	3714	2785	2228	1857	1393	1114	928	
	2		Vc	30	30	30	30	30	30	30	30	30	30	
			fz	0.003	0.006	0.011	0.018	0.023	0.036	0.044	0.056			
			RPM	4775	3183	2387	1910	1592	1194	955	796			
	3-4		Vc	25	25	25	25	25	25	25	25	25	25	
			fz	0.003	0.006	0.009	0.014	0.018	0.03	0.038	0.048			
			RPM	3979	2653	1989	1592	1326	995	796	663			
	5		Vc	15	15	15	15	15	15	15	15	15	15	
			fz	0.002	0.004	0.009	0.013	0.019	0.03	0.037	0.046			
RPM		2387	1592	1194	955	796	597	477	398					
6	Vc	30	30	30	30	30	30	30	30	30	30			
	fz	0.003	0.006	0.011	0.018	0.023	0.036	0.044	0.056					
	RPM	4775	3183	2387	1910	1592	1194	955	796					
7	Vc	25	25	25	25	25	25	25	25	25	25			
	fz	0.003	0.006	0.009	0.014	0.018	0.03	0.038	0.048					
	RPM	3979	2653	1989	1592	1326	995	796	663					
8-9	Vc	15	15	15	15	15	15	15	15	15	15			
	fz	0.002	0.004	0.009	0.013	0.019	0.03	0.037	0.046					
	RPM	2387	1592	1194	955	796	597	477	398					
10	Vc	30	30	30	30	30	30	30	30	30	30			
	fz	0.003	0.006	0.011	0.018	0.023	0.036	0.044	0.056					
	RPM	4775	3183	2387	1910	1592	1194	955	796					
11.1	Vc	15	15	15	15	15	15	15	15	15	15			
	fz	0.002	0.004	0.009	0.013	0.019	0.03	0.037	0.046					
	RPM	2387	1592	1194	955	796	597	477	398					
N	21-22	Aluminum-wrought alloy	0.1D	1.5D	Vc	75	105	100	100	105	100	95	95	
					fz	0.005	0.008	0.014	0.019	0.021	0.037	0.048	0.057	
					RPM	11937	11141	7958	6366	5570	3979	3024	2520	
	23-24		Vc	49	68	65	65	68	65	62	62	62	62	
			fz	0.005	0.008	0.014	0.019	0.021	0.037	0.048	0.057			
			RPM	7799	7215	5173	4138	3608	2586	1974	1645			
N	21-22	Aluminum-cast, alloyed	0.1D	1.5D	Vc	49	68	65	65	68	65	62	62	
					fz	0.005	0.008	0.014	0.019	0.021	0.037	0.048	0.057	
					RPM	7799	7215	5173	4138	3608	2586	1974	1645	
	23-24		Vc	117	173	217	236	227	287	284	281			

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

▶ NEXT PAGE

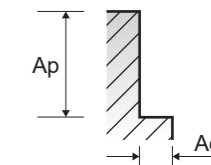


**E2572, E2573, E2516, E2553, E2554 SERIES**

**3 FLUTE - SIDE CUTTING**

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

VDI 3323	Parameter	Diameter (Ø)												
		14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	35.0	36.0	40.0	
1	Vc	35	35	35	35	35	35	35	35	35	35	35	35	35
	fz	0.069	0.079	0.079	0.089	0.1	0.1	0.1	0.1	0.1	0.099	0.097	0.107	
	RPM	796	696	619	557	506	446	398	371	348	318	309	279	
	FEED	165	165	147	149	152	134	119	111	104	95	90	89	
2	Vc	30	30	30	30	30	30	30	30	30	30	30	30	
	fz	0.057	0.071	0.08	0.089	0.089	0.092	0.09	0.086	0.089	0.083	0.087	0.098	
	RPM	682	597	531	477	434	382	341	318	298	273	265	239	
	FEED	117	127	127	127	116	105	92	82	80	68	69	70	
3-4	Vc	25	25	25	25	25	25	25	25	25	25	25	25	
	fz	0.054	0.059	0.067	0.067	0.076	0.076	0.071	0.073	0.076	0.071	0.075	0.083	
	RPM	568	497	442	398	362	318	284	265	199	227	221	199	
	FEED	92	88	89	80	82	67	61	58	45	48	50	50	
5	Vc	15	15	15	15	15	15	15	15	15	15	15	15	
	fz	0.052	0.06	0.067	0.076	0.076	0.065	0.063	0.063	0.071	0.064	0.069	0.076	
	RPM	341	298	265	239	217	191	171	159	149	136	133	119	
	FEED	53	54	53	54	49	37	32	30	32	26	27	27	
6	Vc	30	30	30	30	30	30	30	30	30	30	30	30	
	fz	0.057	0.071	0.08	0.089	0.089	0.092	0.09	0.086	0.089	0.083	0.087	0.098	
	RPM	682	597	531	477	434	382	341	318	298	273	265	239	
	FEED	117	127	127	127	116	105	92	82	80	68	69	70	
7	Vc	25	25	25	25	25	25	25	25	25	25	25	25	
	fz	0.054	0.059	0.067	0.067	0.076	0.076	0.071	0.073	0.076	0.071	0.075	0.083	
	RPM	568	497	442	398	362	318	284	265	199	227	221	199	
	FEED	92	88	89	80	82	67	61	58	45	48	50	50	
8-9	Vc	15	15	15	15	15	15	15	15	15	15	15	15	
	fz	0.052	0.06	0.067	0.076	0.076	0.065	0.063	0.063	0.071	0.064	0.069	0.076	
	RPM	341	298	265	239	217	191	171	159	149	136	133	119	
	FEED	53	54	53	54	49	37	32	30	32	26	27	27	
10	Vc	30	30	30	30	30	30	30	30	30	30	30	30	
	fz	0.057	0.071	0.08	0.089	0.089	0.092	0.09	0.086	0.089	0.083	0.087	0.098	
	RPM	682	597	531	477	434	382	341	318	298	273	265	239	
	FEED	117	127	127	127	116	105	92	82	80	68	69	70	
11.1	Vc	15	15	15	15	15	15	15	15	15	15	15	15	
	fz	0.052	0.06	0.067	0.076	0.076	0.065	0.063	0.063	0.071	0.064	0.069	0.076	
	RPM	341	298	265	239	217	191	171	159	149	136	133	119	
	FEED	53	54	53	54	49	37	32	30	32	26	27	27	
21-22	Vc	95	100	100	100	95	95	95	95	105	100	100	100	
	fz	0.061	0.067	0.074	0.075	0.081	0.089	0.091	0.091	0.09	0.091	0.093	0.092	
	RPM	2160	1989	1768	1592	1375	1210	1080	1114	995	884	796	796	
	FEED	395	400	393	358	334	323	295	304	269	261	247	220	
23-24	Vc	62	65	65	65	62	62	62	62	68	65	65	65	
	fz	0.061	0.067	0.074	0.075	0.081	0.089	0.091	0.091	0.09	0.091	0.093	0.092	
	RPM	1410	1293	1149	1035	897	789	705	722	647	618	575	517	
	FEED	258	260	255	233	218	211	192	197	175	169	160	143	



**EQ572, EQ573, EQ516, EQ553, EQ554 SERIES**

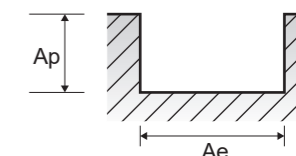
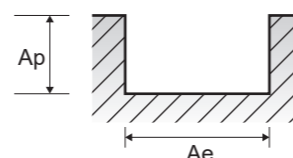
**3 FLUTE TiAlN COATED - SLOTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)							
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0
P	1	Non-alloy steel	1.0D	0.5D	Vc	50	45	50	50	45	50	45	50
					fz	0.002	0.005	0.007	0.012	0.015	0.021	0.028	0.036
					RPM	7958	4775	3979	3183	2387	1989	1432	1326
	2		Vc	40	40	40	40	40	40	40	40		
			fz	0.002	0.004	0.006	0.01	0.014	0.022	0.028	0.033		
			RPM	6366	4244	3183	2546	2122	1592	1273	1061		
	3-4		Vc	35	35	30	35	30	35	35	35		
			fz	0.002	0.003	0.005	0.008	0.011	0.018	0.023	0.028		
			RPM	5570	3714	2387	2228	1592	1393	1114	928		
	5		Vc	20	20	20	20	20	20	20	20		
			fz	0.002	0.003	0.007	0.008	0.011	0.017	0.021	0.03		
RPM		3183	2122	1592	1273	1061	796	637	531				
6	Vc	40	40	40	40	40	40	40	40				
	fz	0.002	0.004	0.006	0.01	0.014	0.022	0.028	0.033				
	RPM	6366	4244	3183	2546	2122	1592	1273	1061				
7	Vc	35	35	30	35	30	35	35	35				
	fz	0.002	0.003	0.005	0.008	0.011	0.018	0.023	0.028				
	RPM	5570	3714	2387	2228	1592	1393	1114	928				
8-9	Vc	20	20	20	20	20	20	20	20				
	fz	0.002	0.003	0.007	0.008	0.011	0.017	0.021	0.03				
	RPM	3183	2122	1592	1273	1061	796	637	531				
10	Vc	40	40	40	40	40	40	40	40				
	fz	0.002	0.004	0.006	0.01	0.014	0.022	0.028	0.033				
	RPM	6366	4244	3183	2546	2122	1592	1273	1061				
11.1	Vc	20	20	20	20	20	20	20	20				
	fz	0.002	0.003	0.007	0.008	0.011	0.017	0.021	0.03				
	RPM	3183	2122	1592	1273	1061	796	637	531				
21-22	Vc	105	145	140	140	145	140	135	130				
	fz	0.003	0.005	0.008	0.011	0.012	0.021	0.029	0.034				
	RPM	16711	15385	11141	8913	7692	5570	4297	3448				
23-24	Vc	68	94	91	91	94	91	88	85				
	fz	0.003	0.005	0.008	0.011	0.012	0.021	0.029	0.034				
	RPM	10823	9974	7242	5793	4987	3621	2801	2255				
					FEED	150	231	267	294	277	351	374	352
					FEED	97	150	174	191	180	228	244	230

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

▶ NEXT PAGE



**EQ572, EQ573, EQ516, EQ553, EQ554 SERIES**

**3 FLUTE TiAlN COATED - SLOTTING**

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

VDI 3323	Parameter	Diameter (Ø)											
		14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	35.0	36.0	40.0
1	Vc	50	50	50	50	50	50	50	45	50	50	50	50
	fz	0.042	0.048	0.047	0.053	0.06	0.058	0.06	0.058	0.058	0.059	0.058	0.064
	RPM	1137	995	884	796	723	637	568	477	497	455	442	398
2	Vc	45	40	40	40	45	45	40	40	40	40	40	40
	fz	0.034	0.043	0.048	0.053	0.053	0.054	0.051	0.054	0.056	0.056	0.052	0.059
	RPM	1023	796	707	637	651	573	512	424	398	364	354	318
3-4	Vc	35	30	30	35	35	35	35	30	30	30	30	30
	fz	0.032	0.037	0.042	0.042	0.048	0.043	0.043	0.038	0.043	0.04	0.042	0.047
	RPM	796	597	531	557	506	446	398	371	298	273	265	239
5	Vc	20	20	20	20	20	20	20	20	20	20	20	20
	fz	0.034	0.034	0.038	0.043	0.043	0.04	0.045	0.045	0.05	0.046	0.039	0.044
	RPM	455	398	354	318	289	255	227	212	199	182	177	159
6	Vc	45	40	40	40	45	45	40	40	40	40	40	40
	fz	0.034	0.043	0.048	0.053	0.053	0.054	0.051	0.054	0.056	0.056	0.052	0.059
	RPM	1023	796	707	637	651	573	512	424	398	364	354	318
7	Vc	35	30	30	35	35	35	35	30	30	30	30	30
	fz	0.032	0.037	0.042	0.042	0.048	0.043	0.043	0.038	0.043	0.04	0.042	0.047
	RPM	796	597	531	557	506	446	398	371	298	273	265	239
8-9	Vc	20	20	20	20	20	20	20	20	20	20	20	20
	fz	0.034	0.034	0.038	0.043	0.043	0.04	0.045	0.045	0.05	0.046	0.039	0.044
	RPM	455	398	354	318	289	255	227	212	199	182	177	159
10	Vc	45	40	40	40	45	45	40	40	40	40	40	40
	fz	0.034	0.043	0.048	0.053	0.053	0.054	0.051	0.054	0.056	0.056	0.052	0.059
	RPM	1023	796	707	637	651	573	512	424	398	364	354	318
11.1	Vc	20	20	20	20	20	20	20	20	20	20	20	20
	fz	0.034	0.034	0.038	0.043	0.043	0.04	0.045	0.045	0.05	0.046	0.039	0.044
	RPM	455	398	354	318	289	255	227	212	199	182	177	159
21-22	Vc	135	140	140	140	135	135	130	140	140	145	140	140
	fz	0.037	0.04	0.045	0.047	0.048	0.053	0.056	0.056	0.054	0.055	0.056	0.055
	RPM	3069	2785	2476	2228	1953	1719	1478	1485	1393	1319	1238	1114
23-24	Vc	88	91	91	91	88	88	85	91	91	94	91	91
	fz	0.037	0.04	0.045	0.047	0.048	0.053	0.056	0.056	0.054	0.055	0.056	0.055
	RPM	2001	1810	1609	1448	1273	1120	966	966	905	855	805	724
					FEED	341	334	334	314	281	273	248	250
					FEED	222	217	217	204	183	178	162	162

**EQ572, EQ573, EQ516, EQ553, EQ554 SERIES**

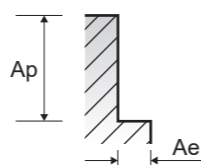
**3 FLUTE TiAlN COATED - SIDE CUTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)							
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0
P	1	Non-alloy steel	0.1D	1.5D	Vc	50	45	50	50	45	50	45	50
					fz	0.004	0.007	0.012	0.02	0.025	0.035	0.047	0.059
					RPM	7958	4775	3979	3183	2387	1989	1432	1326
	2		Vc	40	40	40	40	40	40	40	40		
			fz	0.003	0.006	0.011	0.017	0.023	0.038	0.044	0.058		
			RPM	6366	4244	3183	2546	2122	1592	1273	1061		
	3-4		Vc	35	35	30	35	30	35	35	35		
			fz	0.003	0.006	0.009	0.014	0.018	0.028	0.038	0.047		
			RPM	5570	3714	2387	2228	1592	1393	1114	928		
	5		Vc	20	20	20	20	20	20	20	20		
			fz	0.002	0.005	0.009	0.013	0.018	0.03	0.037	0.045		
RPM		3183	2122	1592	1273	1061	796	637	531				
6	Vc	40	40	40	40	40	40	40	40				
	fz	0.003	0.006	0.011	0.017	0.023	0.038	0.044	0.058				
	RPM	6366	4244	3183	2546	2122	1592	1273	1061				
7	Vc	35	35	30	35	30	35	35	35				
	fz	0.003	0.006	0.009	0.014	0.018	0.028	0.038	0.047				
	RPM	5570	3714	2387	2228	1592	1393	1114	928				
8-9	Vc	20	20	20	20	20	20	20	20				
	fz	0.002	0.005	0.009	0.013	0.018	0.03	0.037	0.045				
	RPM	3183	2122	1592	1273	1061	796	637	531				
10	Vc	40	40	40	40	40	40	40	40				
	fz	0.003	0.006	0.011	0.017	0.023	0.038	0.044	0.058				
	RPM	6366	4244	3183	2546	2122	1592	1273	1061				
11.1	Vc	20	20	20	20	20	20	20	20				
	fz	0.002	0.005	0.009	0.013	0.018	0.03	0.037	0.045				
	RPM	3183	2122	1592	1273	1061	796	637	531				
21-22	Vc	105	145	140	140	145	140	135	130				
	fz	0.005	0.008	0.014	0.019	0.021	0.037	0.049	0.057				
	RPM	16711	15385	11141	8913	7692	5570	4297	3448				
23-24	Vc	68	94	91	91	94	91	88	85				
	fz	0.005	0.008	0.014	0.019	0.021	0.037	0.049	0.057				
	RPM	10823	9974	7242	5793	4987	3621	2801	2255				

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

▶ NEXT PAGE

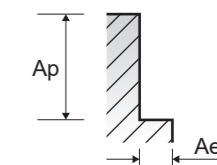


**EQ572, EQ573, EQ516, EQ553, EQ554 SERIES**

**3 FLUTE TiAlN COATED - SIDE CUTTING**

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

VDI 3323	Parameter	Diameter (Ø)											
		14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	35.0	36.0	40.0
1	Vc	50	50	50	50	50	50	50	45	50	50	50	50
	fz	0.07	0.078	0.08	0.09	0.1	0.101	0.101	0.099	0.099	0.096	0.097	0.107
	RPM	1137	995	884	796	723	637	568	477	497	455	442	398
	FEED	239	233	212	215	217	193	172	142	148	131	129	128
2	Vc	45	40	40	40	45	45	45	40	40	40	40	40
	fz	0.058	0.073	0.081	0.09	0.09	0.092	0.088	0.085	0.09	0.088	0.086	0.097
	RPM	1023	796	707	637	651	573	512	424	398	364	354	318
	FEED	178	174	172	172	176	158	135	108	107	96	91	93
3-4	Vc	35	30	30	35	35	35	35	30	30	30	30	30
	fz	0.053	0.058	0.065	0.065	0.075	0.07	0.073	0.071	0.075	0.075	0.077	0.087
	RPM	796	597	531	557	506	446	398	371	298	273	265	239
	FEED	127	104	103	109	114	94	87	79	67	61	61	62
5	Vc	20	20	20	20	20	20	20	20	20	20	20	20
	fz	0.051	0.06	0.067	0.075	0.075	0.067	0.061	0.061	0.067	0.065	0.069	0.078
	RPM	455	398	354	318	289	255	227	212	199	182	177	159
	FEED	70	72	71	72	65	51	42	39	40	35	37	37
6	Vc	45	40	40	40	45	45	45	40	40	40	40	40
	fz	0.058	0.073	0.081	0.09	0.09	0.092	0.088	0.085	0.09	0.088	0.086	0.097
	RPM	1023	796	707	637	651	573	512	424	398	364	354	318
	FEED	178	174	172	172	176	158	135	108	107	96	91	93
7	Vc	35	30	30	35	35	35	35	30	30	30	30	30
	fz	0.053	0.058	0.065	0.065	0.075	0.07	0.073	0.071	0.075	0.075	0.077	0.087
	RPM	796	597	531	557	506	446	398	371	298	273	265	239
	FEED	127	104	103	109	114	94	87	79	67	61	61	62
8-9	Vc	20	20	20	20	20	20	20	20	20	20	20	20
	fz	0.051	0.06	0.067	0.075	0.075	0.067	0.061	0.061	0.067	0.065	0.069	0.078
	RPM	455	398	354	318	289	255	227	212	199	182	177	159
	FEED	70	72	71	72	65	51	42	39	40	35	37	37
10	Vc	45	40	40	40	45	45	45	40	40	40	40	40
	fz	0.058	0.073	0.081	0.09	0.09	0.092	0.088	0.085	0.09	0.088	0.086	0.097
	RPM	1023	796	707	637	651	573	512	424	398	364	354	318
	FEED	178	174	172	172	176	158	135	108	107	96	91	93
11.1	Vc	20	20	20	20	20	20	20	20	20	20	20	20
	fz	0.051	0.06	0.067	0.075	0.075	0.067	0.061	0.061	0.067	0.065	0.069	0.078
	RPM	455	398	354	318	289	255	227	212	199	182	177	159
	FEED	70	72	71	72	65	51	42	39	40	35	37	37
21-22	Vc	135	140	140	140	135	135	130	140	140	145	140	140
	fz	0.06	0.067	0.075	0.076	0.082	0.088	0.093	0.09	0.092	0.093	0.093	0.094
	RPM	3069	2785	2476	2228	1953	1719	1478	1485	1393	1319	1238	1114
	FEED	552	560	557	508	481	454	412	414	376	364	345	314
23-24	Vc	88	91	91	91	88	88	85	91	91	94	91	91
	fz	0.06	0.067	0.075	0.076	0.082	0.088	0.093	0.093	0.092	0.092	0.093	0.094
	RPM	2001	1810	1609	1448	1273	1120	966	966	905	855	805	724
	FEED	360	364	362	330	313	296	270	269	244	236	224	204



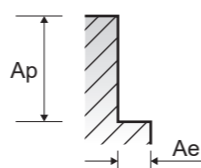
**E2574, E2597 SERIES 4 FLUTE - SIDE CUTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)						
						2.0	3.0	4.0	5.0	6.0	8.0	10.0
P	1	Non-alloy steel	0.1D	1.5D	Vc	35	35	35	35	35	35	35
					fz	0.004	0.008	0.013	0.02	0.025	0.036	0.045
					RPM	5570	3714	2785	2228	1857	1393	1114
	2		Vc	30	30	30	30	30	30	30		
			fz	0.003	0.006	0.011	0.017	0.023	0.036	0.044		
			RPM	4775	3183	2387	1910	1592	1194	955		
	3-4		Vc	25	25	25	25	25	25	25		
			fz	0.003	0.006	0.009	0.014	0.019	0.029	0.038		
			RPM	3979	2653	1989	1592	1326	995	796		
	5		Vc	15	15	15	15	15	15	15		
			fz	0.002	0.005	0.01	0.014	0.019	0.029	0.036		
RPM		2387	1592	1194	955	796	597	477				
6	Vc	30	30	30	30	30	30	30				
	fz	0.003	0.006	0.011	0.017	0.023	0.036	0.044				
	RPM	4775	3183	2387	1910	1592	1194	955				
7	Vc	25	25	25	25	25	25	25				
	fz	0.003	0.006	0.009	0.014	0.019	0.029	0.038				
	RPM	3979	2653	1989	1592	1326	995	796				
8-9	Vc	15	15	15	15	15	15	15				
	fz	0.002	0.005	0.01	0.014	0.019	0.029	0.036				
	RPM	2387	1592	1194	955	796	597	477				
10	Vc	30	30	30	30	30	30	30				
	fz	0.003	0.006	0.011	0.017	0.023	0.036	0.044				
	RPM	4775	3183	2387	1910	1592	1194	955				
11.1	Vc	15	15	15	15	15	15	15				
	fz	0.002	0.005	0.01	0.014	0.019	0.029	0.036				
	RPM	2387	1592	1194	955	796	597	477				
N	21-22	Aluminum-wrought alloy	0.1D	1.5D	Vc	75	105	100	100	105	100	95
					fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048
					RPM	11937	11141	7958	6366	5570	3979	3024
	23-24		Vc	49	68	65	65	68	65	62		
			fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048		
			RPM	7799	7215	5173	4138	3608	2586	1974		

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

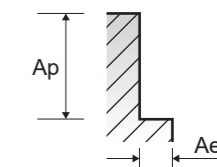
▶ NEXT PAGE



**E2574, E2597 SERIES 4 FLUTE - SIDE CUTTING**

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

VDI 3323	Parameter	Diameter (Ø)											
		12.0	14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	36.0	40.0
1	Vc	35	35	35	35	35	35	35	35	35	35	35	35
	fz	0.061	0.069	0.079	0.079	0.089	0.067	0.067	0.067	0.067	0.067	0.065	0.071
	RPM	928	796	696	619	557	506	446	398	371	348	309	279
2	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.056	0.057	0.071	0.08	0.089	0.059	0.06	0.06	0.059	0.06	0.06	0.068
	RPM	796	682	597	531	477	434	382	341	318	298	265	239
3-4	Vc	25	25	25	25	25	25	25	25	25	25	25	25
	fz	0.048	0.054	0.058	0.066	0.066	0.05	0.048	0.048	0.05	0.049	0.05	0.056
	RPM	663	568	497	442	398	362	318	284	265	199	221	199
5	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.047	0.054	0.058	0.065	0.074	0.049	0.046	0.047	0.047	0.054	0.049	0.053
	RPM	398	341	298	265	239	217	191	171	159	149	133	119
6	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.056	0.057	0.071	0.08	0.089	0.059	0.06	0.06	0.059	0.06	0.06	0.068
	RPM	796	682	597	531	477	434	382	341	318	298	265	239
7	Vc	25	25	25	25	25	25	25	25	25	25	25	25
	fz	0.048	0.054	0.058	0.066	0.066	0.05	0.048	0.048	0.05	0.049	0.05	0.056
	RPM	663	568	497	442	398	362	318	284	265	199	221	199
8-9	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.047	0.054	0.058	0.065	0.074	0.049	0.046	0.047	0.047	0.054	0.049	0.053
	RPM	398	341	298	265	239	217	191	171	159	149	133	119
10	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.056	0.057	0.071	0.08	0.089	0.059	0.06	0.06	0.059	0.06	0.06	0.068
	RPM	796	682	597	531	477	434	382	341	318	298	265	239
11.1	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.047	0.054	0.058	0.065	0.074	0.049	0.046	0.047	0.047	0.054	0.049	0.053
	RPM	398	341	298	265	239	217	191	171	159	149	133	119
21-22	Vc	95	95	100	100	100	95	95	95	95	105	100	100
	fz	0.057	0.06	0.066	0.074	0.075	0.054	0.058	0.061	0.061	0.06	0.061	0.063
	RPM	2520	2160	1989	1768	1592	1375	1210	1080	1114	995	884	796
23-24	Vc	62	62	65	65	65	62	62	62	68	65	65	65
	fz	0.057	0.06	0.066	0.074	0.075	0.054	0.058	0.061	0.061	0.06	0.061	0.063
	RPM	1645	1410	1293	1149	1035	897	789	705	722	647	575	517



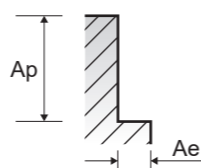
**EQ574, EQ597 SERIES 4 FLUTE TiAlN COATED - SIDE CUTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)								
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	
P	1	Non-alloy steel	0.1D	1.5D	Vc	50	45	50	50	45	50	50	45	
					fz	0.004	0.008	0.013	0.02	0.025	0.036	0.045	0.062	
					RPM	7958	4775	3979	3183	2387	1989	1592	1194	
	FEED		127	153	207	255	239	286	286	296				
	2		0.1D	1.5D	Vc	40	40	40	40	40	40	40	40	
					fz	0.003	0.006	0.011	0.018	0.023	0.036	0.045	0.057	
					RPM	6366	4244	3183	2546	2122	1592	1273	1061	
	FEED		76	102	140	183	195	229	229	242				
	3-4		0.1D	1.5D	Vc	35	35	30	35	30	35	35		
					fz	0.003	0.006	0.009	0.014	0.018	0.029	0.039	0.047	
					RPM	5570	3714	2387	2228	1592	1194	1114	928	
FEED	67	89	86	125	115	138	174	175						
5	0.1D	1.5D	Vc	20	20	20	20	20	20	20				
			fz	0.002	0.004	0.01	0.014	0.019	0.028	0.035	0.048			
			RPM	3183	2122	1592	1273	1061	796	637	531			
FEED	25	34	64	71	81	89	89	102						
6	0.1D	Low alloy steel	0.1D	1.5D	Vc	40	40	40	40	40	40	40		
					fz	0.003	0.006	0.011	0.018	0.023	0.036	0.045	0.057	
					RPM	6366	4244	3183	2546	2122	1592	1273	1061	
FEED	76		102	140	183	195	229	229	242					
7	0.1D		1.5D	Vc	35	35	30	35	30	35	35			
				fz	0.003	0.006	0.009	0.014	0.018	0.029	0.039	0.047		
				RPM	5570	3714	2387	2228	1592	1194	1114	928		
FEED	67		89	86	125	115	138	174	175					
8-9	0.1D		1.5D	Vc	20	20	20	20	20	20	20			
				fz	0.002	0.004	0.01	0.014	0.019	0.028	0.035	0.048		
				RPM	3183	2122	1592	1273	1061	796	637	531		
FEED	25	34	64	71	81	89	89	102						
10	0.1D	High alloyed steel, and tool steel	0.1D	1.5D	Vc	40	40	40	40	40	40	40		
					fz	0.003	0.006	0.011	0.018	0.023	0.036	0.045	0.057	
					RPM	6366	4244	3183	2546	2122	1592	1273	1061	
FEED	76		102	140	183	195	229	229	242					
11.1	0.1D		1.5D	Vc	20	20	20	20	20	20	20			
				fz	0.002	0.004	0.01	0.014	0.019	0.028	0.035	0.048		
				RPM	3183	2122	1592	1273	1061	796	637	531		
FEED	25		34	64	71	81	89	89	102					
21-22	0.1D		1.5D	0.1D	1.5D	Vc	105	145	140	140	150	140	135	
						fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048	0.057
						RPM	16711	15385	11141	8913	7958	5570	4297	3448
FEED	334	554	624	677	668	802	825	786						
23-24	0.1D	1.5D	0.1D	1.5D	Vc	68	94	91	91	98	91	88		
					fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048	0.057	
					RPM	10823	9974	7242	5793	5199	3621	2801	2255	
FEED	216	359	406	440	437	521	538	514						

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

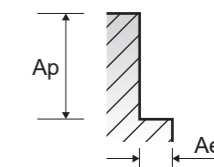
▶ NEXT PAGE



**EQ574, EQ597 SERIES 4 FLUTE TiAlN COATED - SIDE CUTTING**

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

VDI 3323	Parameter	Diameter (Ø)										
		14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	36.0	40.0
1	Vc	50	50	50	50	50	50	50	45	50	50	50
	fz	0.07	0.078	0.078	0.088	0.067	0.064	0.068	0.065	0.065	0.063	0.071
	RPM	1137	995	884	796	723	637	568	477	497	442	398
	FEED	318	310	276	280	291	244	232	186	194	167	170
2	Vc	45	40	40	40	45	45	45	40	40	40	40
	fz	0.056	0.07	0.08	0.087	0.058	0.062	0.058	0.057	0.058	0.06	0.069
	RPM	1023	796	707	637	651	573	512	424	398	354	318
	FEED	229	223	226	222	227	213	178	145	138	127	132
3-4	Vc	35	35	30	35	35	35	35	30	30	30	30
	fz	0.053	0.056	0.066	0.066	0.048	0.046	0.046	0.05	0.05	0.047	0.057
	RPM	796	696	531	557	506	446	398	371	298	309	239
	FEED	169	156	140	147	146	123	110	111	90	87	82
5	Vc	20	20	20	20	20	20	20	20	20	15	20
	fz	0.053	0.056	0.064	0.075	0.05	0.047	0.054	0.054	0.054	0.056	0.056
	RPM	455	398	354	318	289	255	227	212	199	133	159
	FEED	96	89	91	95	87	72	74	69	64	45	53
6	Vc	45	40	40	40	45	45	45	40	40	40	40
	fz	0.056	0.07	0.08	0.087	0.058	0.062	0.058	0.057	0.058	0.06	0.069
	RPM	1023	796	707	637	651	573	512	424	398	354	318
	FEED	229	223	226	222	227	213	178	145	138	127	132
7	Vc	35	35	30	35	35	35	35	30	30	30	30
	fz	0.053	0.056	0.066	0.066	0.048	0.046	0.046	0.05	0.05	0.047	0.057
	RPM	796	696	531	557	506	446	398	371	298	309	239
	FEED	169	156	140	147	146	123	110	111	90	87	82
8-9	Vc	20	20	20	20	20	20	20	20	20	15	20
	fz	0.053	0.056	0.064	0.075	0.05	0.047	0.054	0.054	0.054	0.056	0.056
	RPM	455	398	354	318	289	255	227	212	199	133	159
	FEED	96	89	91	95	87	72	74	69	64	45	53
10	Vc	45	40	40	40	45	45	45	40	40	40	40
	fz	0.056	0.07	0.08	0.087	0.058	0.062	0.058	0.057	0.058	0.06	0.069
	RPM	1023	796	707	637	651	573	512	424	398	354	318
	FEED	229	223	226	222	227	213	178	145	138	127	132
11.1	Vc	20	20	20	20	20	20	20	20	20	15	20
	fz	0.053	0.056	0.064	0.075	0.05	0.047	0.054	0.054	0.054	0.056	0.056
	RPM	455	398	354	318	289	255	227	212	199	133	159
	FEED	96	89	91	95	87	72	74	69	64	45	53
21-22	Vc	135	140	140	140	135	135	135	145	140	140	140
	fz	0.06	0.066	0.074	0.074	0.054	0.058	0.06	0.06	0.06	0.061	0.064
	RPM	3069	2785	2476	2228	1953	1719	1535	1538	1393	1238	1114
	FEED	737	735	733	660	633	598	552	554	501	453	428
23-24	Vc	88	91	91	91	88	88	88	94	91	91	91
	fz	0.06	0.066	0.074	0.074	0.054	0.058	0.06	0.06	0.06	0.061	0.064
	RPM	2001	1810	1609	1448	1273	1120	1000	997	905	805	724
	FEED	480	478	476	429	413	390	360	359	326	294	278



**E2753, E2762, E2751, E2752 SERIES**

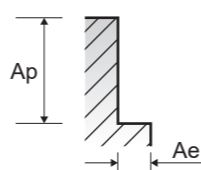
**MULTI FLUTE ROUGHING - SIDE CUTTING**

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

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		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		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	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	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	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	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	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	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

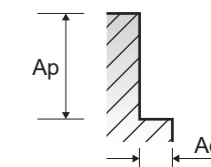


**E2753, E2762, E2751, E2752 SERIES**

**MULTI FLUTE ROUGHING - SIDE CUTTING**

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

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	25	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	25	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



**EQ753, EQ762, EQ751, EQ752 SERIES**

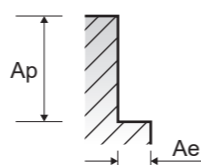
**MULTI FLUTE ROUGHING TiAlN COATED - SIDE CUTTING**

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

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	45	50	50	45	50	50
					fz	0.015	0.025	0.034	0.05	0.057	0.063
					RPM	2387	1989	1592	1194	1137	995
					FEED	107	149	216	239	259	251
	2		Vc	40	40	40	40	45	40		
			fz	0.013	0.023	0.034	0.044	0.049	0.061		
			RPM	2122	1592	1273	1061	1023	796		
	3-4		Vc	30	30	35	35	35	35		
			fz	0.015	0.024	0.035	0.043	0.048	0.06		
			RPM	1592	1194	1114	928	796	696		
5	Vc	20	20	20	20	20	20				
	fz	0.012	0.021	0.033	0.045	0.05	0.063				
	RPM	1061	796	637	531	455	398				
6	Vc	40	40	40	40	45	40				
	fz	0.013	0.023	0.034	0.044	0.049	0.061				
	RPM	2122	1592	1273	1061	1023	796				
7	Vc	30	30	35	35	35	35				
	fz	0.015	0.024	0.035	0.043	0.048	0.06				
	RPM	1592	1194	1114	928	796	696				
8-9	Vc	20	20	20	20	20	20				
	fz	0.012	0.021	0.033	0.045	0.05	0.063				
	RPM	1061	796	637	531	455	398				
10	Vc	40	40	40	40	45	40				
	fz	0.013	0.023	0.034	0.044	0.049	0.061				
	RPM	2122	1592	1273	1061	1023	796				
11.1	Vc	20	20	20	20	20	20				
	fz	0.012	0.021	0.033	0.045	0.05	0.063				
	RPM	1061	796	637	531	455	398				
N	21-22	Aluminum-wrought alloy	0.5D	1.5D	Vc	120	110	110	105	110	115
					fz	0.015	0.025	0.035	0.05	0.059	0.07
					RPM	6366	4377	3501	2785	2501	2288
					FEED	286	328	490	557	590	641
23-24	Aluminum-cast, alloyed	0.5D	1.5D	Vc	78	72	72	68	72	75	
				fz	0.015	0.025	0.035	0.05	0.059	0.07	
				RPM	4138	2865	2292	1804	1637	1492	
				FEED	186	215	321	361	386	418	

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

▶ NEXT PAGE

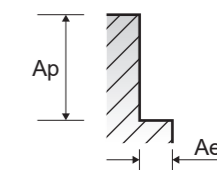


**EQ753, EQ762, EQ751, EQ752 SERIES**

**MULTI FLUTE ROUGHING TiAlN COATED - SIDE CUTTING**

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

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	50	50	50	50	50	45	50	50	50	45
	fz	0.069	0.078	0.089	0.095	0.089	0.098	0.098	0.109	0.117	0.156
	RPM	884	796	723	637	568	477	497	442	398	286
	FEED	244	248	322	302	304	281	292	289	279	268
2	Vc	40	40	45	45	45	40	40	40	40	40
	fz	0.07	0.075	0.074	0.087	0.075	0.083	0.094	0.107	0.117	0.16
	RPM	707	637	651	573	512	424	398	354	318	255
	FEED	198	191	241	249	230	211	224	227	223	244
3-4	Vc	30	35	35	35	35	35	30	35	30	35
	fz	0.07	0.07	0.078	0.087	0.075	0.086	0.1	0.1	0.113	0.148
	RPM	531	557	506	446	398	371	298	309	239	223
	FEED	149	156	197	194	179	192	179	186	162	198
5	Vc	20	20	20	20	20	20	20	20	15	20
	fz	0.071	0.083	0.08	0.096	0.091	0.091	0.1	0.118	0.141	0.153
	RPM	354	318	289	255	227	212	199	177	119	127
	FEED	100	106	116	122	124	116	119	125	101	117
6	Vc	40	40	45	45	45	40	40	40	40	40
	fz	0.07	0.075	0.074	0.087	0.075	0.083	0.094	0.107	0.117	0.16
	RPM	707	637	651	573	512	424	398	354	318	255
	FEED	198	191	241	249	230	211	224	227	223	244
7	Vc	30	35	35	35	35	35	30	35	30	35
	fz	0.07	0.07	0.078	0.087	0.075	0.086	0.1	0.1	0.113	0.148
	RPM	531	557	506	446	398	371	298	309	239	223
	FEED	149	156	197	194	179	192	179	186	162	198
8-9	Vc	20	20	20	20	20	20	20	20	15	20
	fz	0.071	0.083	0.08	0.096	0.091	0.091	0.1	0.118	0.141	0.153
	RPM	354	318	289	255	227	212	199	177	119	127
	FEED	100	106	116	122	124	116	119	125	101	117
10	Vc	40	40	45	45	45	40	40	40	40	40
	fz	0.07	0.075	0.074	0.087	0.075	0.083	0.094	0.107	0.117	0.16
	RPM	707	637	651	573	512	424	398	354	318	255
	FEED	198	191	241	249	230	211	224	227	223	244
11.1	Vc	20	20	20	20	20	20	20	20	15	20
	fz	0.071	0.083	0.08	0.096	0.091	0.091	0.1	0.118	0.141	0.153
	RPM	354	318	289	255	227	212	199	177	119	127
	FEED	100	106	116	122	124	116	119	125	101	117
21-22	Vc	110	105	105	110	110	120	110	115	115	110
	fz	0.085	0.103	0.085	0.09	0.095	0.099	0.106	0.11	0.117	0.124
	RPM	1945	1671	1519	1401	1251	1273	1094	1017	915	700
	FEED	661	689	646	630	713	756	696	671	642	521
23-24	Vc	72	68	68	72	72	78	72	75	75	72
	fz	0.085	0.103	0.085	0.09	0.095	0.099	0.106	0.11	0.117	0.124
	RPM	1273	1082	984	917	819	828	716	663	597	458
	FEED	433	446	418	413	467	492	456	438	419	341



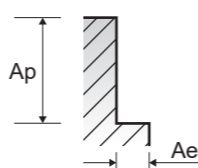
**E2595 SERIES 4FLUTE - SIDE CUTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)						
						2.0	3.0	4.0	5.0	6.0	8.0	10.0
P	1	Non-alloy steel	0.1D	1.5D	Vc	35	35	35	35	35	35	35
					fz	0.004	0.008	0.013	0.02	0.025	0.036	0.045
					RPM	5570	3714	2785	2228	1857	1393	1114
	2		0.1D	1.5D	Vc	30	30	30	30	30	30	30
					fz	0.003	0.006	0.011	0.017	0.023	0.036	0.044
					RPM	4775	3183	2387	1910	1592	1194	955
	3-4		0.1D	1.5D	Vc	25	25	25	25	25	25	25
					fz	0.003	0.006	0.009	0.014	0.019	0.029	0.038
					RPM	3979	2653	1989	1592	1326	995	796
	5		0.1D	1.5D	Vc	15	15	15	15	15	15	15
					fz	0.002	0.005	0.01	0.014	0.019	0.029	0.036
RPM		2387			1592	1194	955	796	597	477		
6	0.1D	1.5D	Vc	30	30	30	30	30	30	30		
			fz	0.003	0.006	0.011	0.017	0.023	0.036	0.044		
			RPM	4775	3183	2387	1910	1592	1194	955		
7	0.1D	1.5D	Vc	25	25	25	25	25	25	25		
			fz	0.003	0.006	0.009	0.014	0.019	0.029	0.038		
			RPM	3979	2653	1989	1592	1326	995	796		
8-9	0.1D	1.5D	Vc	15	15	15	15	15	15	15		
			fz	0.002	0.005	0.01	0.014	0.019	0.029	0.036		
			RPM	2387	1592	1194	955	796	597	477		
10	0.1D	1.5D	Vc	30	30	30	30	30	30	30		
			fz	0.003	0.006	0.011	0.017	0.023	0.036	0.044		
			RPM	4775	3183	2387	1910	1592	1194	955		
11.1	0.1D	1.5D	Vc	15	15	15	15	15	15	15		
			fz	0.002	0.005	0.01	0.014	0.019	0.029	0.036		
			RPM	2387	1592	1194	955	796	597	477		
N	21-22	Aluminum-wrought alloy	0.1D	1.5D	Vc	75	105	100	100	105	100	95
					fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048
					RPM	11937	11141	7958	6366	5570	3979	3024
23-24	Aluminum-cast, alloyed	0.1D	1.5D	Vc	49	68	65	65	68	65	62	
				fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048	
				RPM	7799	7215	5173	4138	3608	2586	1974	

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

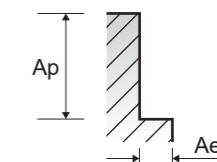
▶ NEXT PAGE



**E2595 SERIES 4 FLUTE - SIDE CUTTING**

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

VDI 3323	Parameter	Diameter (Ø)											
		12.0	14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	36.0	40.0
1	Vc	35	35	35	35	35	35	35	35	35	35	35	35
	fz	0.061	0.069	0.079	0.079	0.089	0.1	0.1	0.067	0.067	0.067	0.065	0.071
	RPM	928	796	696	619	557	506	446	398	371	348	309	279
2	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.056	0.057	0.071	0.08	0.089	0.089	0.091	0.06	0.059	0.06	0.06	0.068
	RPM	796	682	597	531	477	434	382	341	318	298	265	239
3-4	Vc	25	25	25	25	25	25	25	25	25	25	25	25
	fz	0.048	0.054	0.058	0.066	0.066	0.075	0.073	0.048	0.05	0.049	0.05	0.056
	RPM	663	568	497	442	398	362	318	284	265	199	221	199
5	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.047	0.054	0.058	0.065	0.074	0.074	0.069	0.047	0.047	0.054	0.049	0.053
	RPM	398	341	298	265	239	217	191	171	159	149	133	119
6	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.056	0.057	0.071	0.08	0.089	0.089	0.091	0.06	0.059	0.06	0.06	0.068
	RPM	796	682	597	531	477	434	382	341	318	298	265	239
7	Vc	25	25	25	25	25	25	25	25	25	25	25	25
	fz	0.048	0.054	0.058	0.066	0.066	0.075	0.073	0.048	0.05	0.049	0.05	0.056
	RPM	663	568	497	442	398	362	318	284	265	199	221	199
8-9	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.047	0.054	0.058	0.065	0.074	0.074	0.069	0.047	0.047	0.054	0.049	0.053
	RPM	398	341	298	265	239	217	191	171	159	149	133	119
10	Vc	30	30	30	30	30	30	30	30	30	30	30	30
	fz	0.056	0.057	0.071	0.08	0.089	0.089	0.091	0.06	0.059	0.06	0.06	0.068
	RPM	796	682	597	531	477	434	382	341	318	298	265	239
11.1	Vc	15	15	15	15	15	15	15	15	15	15	15	15
	fz	0.047	0.054	0.058	0.065	0.074	0.074	0.069	0.047	0.047	0.054	0.049	0.053
	RPM	398	341	298	265	239	217	191	171	159	149	133	119
21-22	Vc	95	95	100	100	100	95	95	95	105	100	100	100
	fz	0.057	0.06	0.066	0.074	0.075	0.08	0.088	0.061	0.061	0.06	0.061	0.06
	RPM	2520	2160	1989	1768	1592	1375	1210	1080	1114	995	884	796
23-24	Vc	62	62	65	65	65	62	62	62	68	65	65	65
	fz	0.057	0.06	0.066	0.074	0.075	0.08	0.088	0.061	0.061	0.06	0.061	0.06
	RPM	1645	1410	1293	1149	1035	897	789	705	722	647	575	517



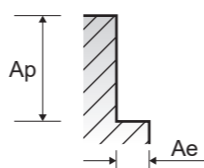
**EQ595 SERIES 4 FLUTE TiAlN COATED - SIDE CUTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)						
						2.0	3.0	4.0	5.0	6.0	8.0	10.0
P	1	Non-alloy steel	0.1D	1.5D	Vc	50	45	50	50	45	50	50
					fz	0.004	0.008	0.013	0.02	0.025	0.036	0.045
					RPM	7958	4775	3979	3183	2387	1989	1592
	2		0.1D	1.5D	Vc	40	40	40	40	40	40	40
					fz	0.003	0.006	0.011	0.018	0.023	0.036	0.045
					RPM	6366	4244	3183	2546	2122	1592	1273
	3-4		0.1D	1.5D	Vc	35	35	30	35	30	35	35
					fz	0.003	0.006	0.009	0.014	0.018	0.029	0.039
					RPM	5570	3714	2387	2228	1592	1194	1114
	5		0.1D	1.5D	Vc	20	20	20	20	20	20	20
					fz	0.002	0.004	0.01	0.014	0.019	0.028	0.035
RPM		3183			2122	1592	1273	1061	796	637		
6	0.1D	1.5D	Vc	40	40	40	40	40	40	40		
			fz	0.003	0.006	0.011	0.018	0.023	0.036	0.045		
			RPM	6366	4244	3183	2546	2122	1592	1273		
7	0.1D	1.5D	Vc	35	35	30	35	30	35	35		
			fz	0.003	0.006	0.009	0.014	0.018	0.029	0.039		
			RPM	5570	3714	2387	2228	1592	1194	1114		
8-9	0.1D	1.5D	Vc	20	20	20	20	20	20	20		
			fz	0.002	0.004	0.01	0.014	0.019	0.028	0.035		
			RPM	3183	2122	1592	1273	1061	796	637		
10	0.1D	1.5D	Vc	40	40	40	40	40	40	40		
			fz	0.003	0.006	0.011	0.018	0.023	0.036	0.045		
			RPM	6366	4244	3183	2546	2122	1592	1273		
11.1	0.1D	1.5D	Vc	20	20	20	20	20	20	20		
			fz	0.002	0.004	0.01	0.014	0.019	0.028	0.035		
			RPM	3183	2122	1592	1273	1061	796	637		
21-22	0.1D	1.5D	Vc	105	145	140	140	150	140	135		
			fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048		
			RPM	16711	15385	11141	8913	7958	5570	4297		
23-24	0.1D	1.5D	Vc	68	94	91	91	98	91	88		
			fz	0.005	0.009	0.014	0.019	0.021	0.036	0.048		
			RPM	10823	9974	7242	5793	5199	3621	2801		

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

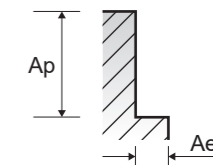
▶ NEXT PAGE



**EQ595 SERIES 4 FLUTE TiAlN COATED - SIDE CUTTING**

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

VDI 3323	Parameter	Diameter (Ø)											
		12.0	14.0	16.0	18.0	20.0	22.0	25.0	28.0	30.0	32.0	36.0	40.0
1	Vc	45	50	50	50	50	50	50	50	45	50	50	50
	fz	0.062	0.07	0.078	0.078	0.088	0.1	0.096	0.068	0.065	0.065	0.063	0.071
	RPM	1194	1137	995	884	796	723	637	568	477	497	442	398
	FEED	296	318	310	276	280	289	244	232	186	194	167	170
2	Vc	40	45	40	40	40	45	45	45	40	40	40	40
	fz	0.057	0.056	0.07	0.08	0.087	0.087	0.093	0.058	0.057	0.058	0.06	0.069
	RPM	1061	1023	796	707	637	651	573	512	424	398	354	318
	FEED	242	229	223	226	222	227	213	178	145	138	127	132
3-4	Vc	35	35	35	30	35	35	35	35	30	35	35	30
	fz	0.047	0.053	0.056	0.066	0.066	0.073	0.069	0.046	0.05	0.05	0.047	0.057
	RPM	928	796	696	531	557	506	446	398	371	298	309	239
	FEED	175	169	156	140	147	148	123	110	111	90	87	82
5	Vc	20	20	20	20	20	20	20	20	20	20	15	20
	fz	0.048	0.053	0.056	0.064	0.075	0.075	0.07	0.054	0.054	0.054	0.056	0.056
	RPM	531	455	398	354	318	289	255	227	212	199	133	159
	FEED	102	96	89	91	95	87	71	74	69	64	45	53
6	Vc	40	45	40	40	40	45	45	45	40	40	40	40
	fz	0.057	0.056	0.07	0.08	0.087	0.087	0.093	0.058	0.057	0.058	0.06	0.069
	RPM	1061	1023	796	707	637	651	573	512	424	398	354	318
	FEED	242	229	223	226	222	227	213	178	145	138	127	132
7	Vc	35	35	35	30	35	35	35	35	30	35	35	30
	fz	0.047	0.053	0.056	0.066	0.066	0.073	0.069	0.046	0.05	0.05	0.047	0.057
	RPM	928	796	696	531	557	506	446	398	371	298	309	239
	FEED	175	169	156	140	147	148	123	110	111	90	87	82
8-9	Vc	20	20	20	20	20	20	20	20	20	20	15	20
	fz	0.048	0.053	0.056	0.064	0.075	0.075	0.07	0.054	0.054	0.054	0.056	0.056
	RPM	531	455	398	354	318	289	255	227	212	199	133	159
	FEED	102	96	89	91	95	87	71	74	69	64	45	53
10	Vc	40	45	40	40	40	45	45	45	40	40	40	40
	fz	0.057	0.056	0.07	0.08	0.087	0.087	0.093	0.058	0.057	0.058	0.06	0.069
	RPM	1061	1023	796	707	637	651	573	512	424	398	354	318
	FEED	242	229	223	226	222	227	213	178	145	138	127	132
11.1	Vc	20	20	20	20	20	20	20	20	20	20	15	20
	fz	0.048	0.053	0.056	0.064	0.075	0.075	0.07	0.054	0.054	0.054	0.056	0.056
	RPM	531	455	398	354	318	289	255	227	212	199	133	159
	FEED	102	96	89	91	95	87	71	74	69	64	45	53
21-22	Vc	130	135	140	140	140	135	135	135	145	140	140	140
	fz	0.057	0.06	0.066	0.074	0.074	0.081	0.087	0.06	0.06	0.06	0.061	0.064
	RPM	3448	3069	2785	2476	2228	1953	1719	1535	1538	1393	1238	1114
	FEED	786	737	735	733	660	633	598	552	554	501	453	428
23-24	Vc	85	88	91	91	91	88	88	88	94	91	91	91
	fz	0.057	0.06	0.066	0.074	0.074	0.081	0.087	0.06	0.06	0.06	0.061	0.064
	RPM	2255	2001	1810	1609	1448	1273	1120	1000	997	905	805	724
	FEED	514	480	478	476	429	413	390	360	359	326	294	278



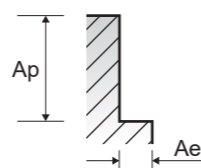
**E2755 SERIES 3 FLUTE ROUGHING - SIDE CUTTING**

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)			
						6.0	8.0	10.0	12.0
P	1	Non-alloy steel	0.5D	1.5D	Vc	35	35	35	35
					fz	0.015	0.025	0.045	0.067
					RPM	1857	1393	1114	928
	FEED		84	104	150	187			
	2		Vc	30	30	30	30		
			fz	0.013	0.023	0.044	0.058		
			RPM	1592	1194	955	796		
	FEED		62	82	126	138			
	3-4		Vc	25	25	25	25		
			fz	0.015	0.024	0.046	0.058		
			RPM	1326	995	796	663		
FEED	60	72	110	115					
5	Vc	15	15	15	15				
	fz	0.013	0.021	0.044	0.058				
	RPM	796	597	477	398				
FEED	31	38	63	69					
6	Vc	30	30	30	30				
	fz	0.013	0.023	0.044	0.058				
	RPM	1592	1194	955	796				
FEED	62	82	126	138					
7	Vc	25	25	25	25				
	fz	0.015	0.024	0.046	0.058				
	RPM	1326	995	796	663				
FEED	60	72	110	115					
8-9	Vc	15	15	15	15				
	fz	0.013	0.021	0.044	0.058				
	RPM	796	597	477	398				
FEED	31	38	63	69					
10	Vc	30	30	30	30				
	fz	0.013	0.023	0.044	0.058				
	RPM	1592	1194	955	796				
FEED	62	82	126	138					
11.1	Vc	15	15	15	15				
	fz	0.013	0.021	0.044	0.058				
	RPM	796	597	477	398				
FEED	31	38	63	69					
N	21-22	Aluminum-wrought alloy	0.5D	1.5D	Vc	85	80	80	75
					fz	0.015	0.025	0.047	0.067
					RPM	4509	3183	2546	1989
FEED	203	239	359	400					
23-24	Aluminum-cast, alloyed	0.5D	1.5D	Vc	55	52	52	49	
				fz	0.015	0.025	0.047	0.067	
				RPM	2918	2069	1655	1300	
FEED	131	155	233	261					

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

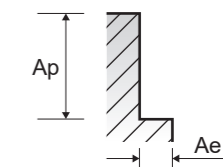
▶ NEXT PAGE



**E2755 SERIES 3 FLUTE ROUGHING - SIDE CUTTING**

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

VDI 3323	Parameter	Diameter (Ø)						
		14.0	16.0	18.0	20.0	22.0	25.0	30.0
1	Vc	35	35	35	35	35	35	35
	fz	0.075	0.086	0.095	0.107	0.147	0.163	0.2
	RPM	796	696	619	557	506	446	371
FEED	179	180	176	179	223	218	223	
2	Vc	30	30	30	30	30	30	30
	fz	0.067	0.083	0.093	0.104	0.126	0.142	0.172
	RPM	682	597	531	477	434	382	318
FEED	137	149	148	149	164	163	164	
3-4	Vc	25	25	25	25	25	25	25
	fz	0.065	0.081	0.092	0.092	0.133	0.151	0.173
	RPM	568	497	442	398	362	318	265
FEED	111	121	122	110	144	144	138	
5	Vc	15	15	15	15	15	15	15
	fz	0.067	0.083	0.093	0.106	0.129	0.157	0.177
	RPM	341	298	265	239	217	191	159
FEED	69	74	74	76	84	90	85	
6	Vc	30	30	30	30	30	30	30
	fz	0.067	0.083	0.093	0.104	0.126	0.142	0.172
	RPM	682	597	531	477	434	382	318
FEED	137	149	148	149	164	163	164	
7	Vc	25	25	25	25	25	25	25
	fz	0.065	0.081	0.092	0.092	0.133	0.151	0.173
	RPM	568	497	442	398	362	318	265
FEED	111	121	122	110	144	144	138	
8-9	Vc	15	15	15	15	15	15	15
	fz	0.067	0.083	0.093	0.106	0.129	0.157	0.177
	RPM	341	298	265	239	217	191	159
FEED	69	74	74	76	84	90	85	
10	Vc	30	30	30	30	30	30	30
	fz	0.067	0.083	0.093	0.104	0.126	0.142	0.172
	RPM	682	597	531	477	434	382	318
FEED	137	149	148	149	164	163	164	
11.1	Vc	15	15	15	15	15	15	15
	fz	0.067	0.083	0.093	0.106	0.129	0.157	0.177
	RPM	341	298	265	239	217	191	159
FEED	69	74	74	76	84	90	85	
21 - 22	Vc	80	80	80	75	75	80	85
	fz	0.078	0.094	0.112	0.139	0.142	0.15	0.196
	RPM	1819	1592	1415	1194	1085	1019	902
FEED	426	449	475	498	462	458	530	
23 - 24	Vc	52	52	52	49	49	52	55
	fz	0.078	0.094	0.112	0.139	0.142	0.15	0.196
	RPM	1182	1035	920	780	709	662	584
FEED	277	292	309	325	302	298	343	





Global Cutting Tool Leader **YG-1**



# MILLING