



UNCOATED

E9A26 SERIES

TiAlN based COATED

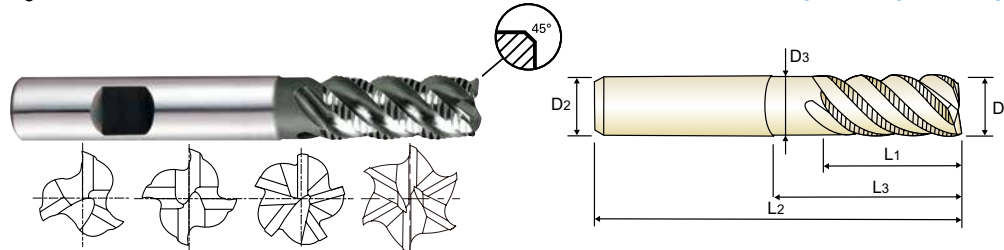
GAA26 SERIES

HSS-PM, MULTI FLUTE 45°HELIX SHORT LENGTH ROUGHING - FINE

- **HSS-PM, MULTI SCHNEIDEN 45°RECHTSSPIRALE KURZ SCHRUPFRÄSER - FEIN**
- **FRAISES HSS-PM, MULTI-DENTS RAVAGEUSE HÉLICE À 45° - PAS FINS, SÉRIE COURTE**
- **MULTI TAGL., ELICA 45°, PER SGROS., SERIE CORTA, BOMBATO FINE - HSS PM**

- ▶ High chip removal and minimizing breakages of cutting edges.
- ▶ Designed to machine carbon steels, alloyed steels, stainless steels
- ▶ YG-1's new developed TANK-POWER Coating suitable for high speed cutting

- ▶ Schnelle Spanabfuhr und Minimierung von Schneidkantenausbrüchen
- ▶ Geeignet zum Fräsen von Stahl, legiertem Stahl und rostfreier Stahl.
- ▶ Neuentwickelte Beschichtung für Hochgeschwindigkeitsfräsen.

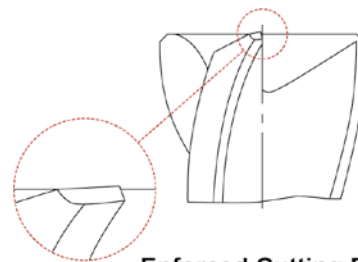


Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter	No. of Flute	Chamfer
UNCOATED	X-COATING	D1(js12)	D2(h6)	L1	L3	L2	D3		
E9A26040	GAA26040	4.0	6	11	-	57	-	3	0.1
E9A26050	GAA26050	5.0	6	13	-	57	-	4	0.13
E9A26060	GAA26060	6.0	6	13	-	57	-	4	0.15
E9A26070	GAA26070	7.0	10	16	-	66	-	4	0.15
E9A26080	GAA26080	8.0	10	19	-	69	-	4	0.18
E9A26090	GAA26090	9.0	10	19	-	69	-	4	0.18
E9A26100	GAA26100	10.0	10	22	31	72	9.5	4	0.20
E9A26120	GAA26120	12.0	12	26	37	83	11.5	4	0.20
E9A26140	GAA26140	14.0	12	26	-	83	-	5	0.20
E9A26160	GAA26160	16.0	16	32	44	92	15	5	0.20
E9A26180	GAA26180	18.0	16	32	-	92	-	6	0.20
E9A26200	GAA26200	20.0	20	38	54	104	19	6	0.20
E9A26250	GAA26250	25.0	25	45	63	121	24	6	0.20

Tolerances according to DIN 7160 & 7161

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



Enforced Cutting Edge

◎ : Excellent ○ : Good

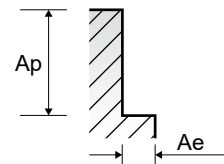
ISO Material Description	P										M				K							
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel				Grey cast iron		Nodular cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	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

E9A26 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	18.0	20.0	22.0	25.0	
P	1	Non-alloy steel	0.5D	1.5D	Vc	35	40	40	40	40	40	40	40	40	40	
					fz	0.018	0.028	0.05	0.059	0.056	0.063	0.061	0.067	0.072	0.08	
					RPM	1857	1592	1273	1061	909	796	707	637	579	509	
	FEED		134	178	255	250	255	251	259	256	250	244				
	2		0.5D	1.5D	Vc	30	35	30	30	30	30	35	30	30	30	
					fz	0.018	0.027	0.049	0.063	0.058	0.064	0.056	0.067	0.078	0.081	
					RPM	1592	1393	955	796	682	597	619	477	434	382	
	FEED		115	150	187	201	198	191	208	192	203	186				
	3-4		0.5D	1.5D	Vc	20	25	20	25	20	25	25	25	20	20	
					fz	0.017	0.028	0.044	0.058	0.055	0.062	0.057	0.065	0.073	0.08	
RPM		1061			995	637	663	455	497	442	398	289	255			
FEED	72	111	112	154	125	154	151	155	127	122						
5	0.5D	1.5D	Vc	15	20	20	20	20	20	20	20	20	20			
			fz	0.018	0.027	0.042	0.055	0.051	0.059	0.056	0.061	0.068	0.076			
			RPM	796	796	637	531	455	398	354	318	289	255			
FEED	57	86	107	117	116	117	119	117	118	116						
6	0.5D	Low alloy steel	1.5D	Vc	30	35	30	30	30	30	35	30	30	30		
				fz	0.018	0.027	0.049	0.063	0.058	0.064	0.056	0.067	0.078	0.081		
				RPM	1592	1393	955	796	682	597	619	477	434	382		
FEED	115		150	187	201	198	191	208	192	203	186					
7	0.5D		1.5D	Vc	20	25	20	25	20	25	25	25	20	20		
				fz	0.017	0.028	0.044	0.058	0.055	0.062	0.057	0.065	0.073	0.08		
				RPM	1061	995	637	663	455	497	442	398	289	255		
FEED	72		111	112	154	125	154	151	155	127	122					
8-9	0.5D		1.5D	Vc	15	20	20	20	20	20	20	20	20	20		
				fz	0.018	0.027	0.042	0.055	0.051	0.059	0.056	0.061	0.068	0.076		
		RPM		796	796	637	531	455	398	354	318	289	255			
FEED	57	86	107	117	116	117	119	117	118	116						
10	0.5D	High alloyed steel, and tool steel	1.5D	Vc	30	35	30	30	30	30	35	30	30	30		
				fz	0.018	0.027	0.049	0.063	0.058	0.064	0.056	0.067	0.078	0.081		
				RPM	1592	1393	955	796	682	597	619	477	434	382		
FEED	115		150	187	201	198	191	208	192	203	186					
11.1	0.5D		1.5D	Vc	15	20	20	20	20	20	20	20	20	20		
				fz	0.018	0.027	0.042	0.055	0.051	0.059	0.056	0.061	0.068	0.076		
				RPM	796	796	637	531	455	398	354	318	289	255		
FEED	57		86	107	117	116	117	119	117	118	116					
M	14.1		Stainless steel	0.5D	1.5D	Vc	20	20	20	20	20	20	20	20	20	20
						fz	0.02	0.03	0.045	0.065	0.06	0.069	0.064	0.073	0.081	0.086
		RPM				1061	796	637	531	455	398	354	318	289	255	
		FEED				85	95	115	138	136	137	136	139	141	131	
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.5D	1.5D	Vc	30	35	30	30	30	30	35	30	30	30	
					fz	0.018	0.027	0.049	0.063	0.058	0.064	0.056	0.067	0.078	0.081	
					RPM	1592	1393	955	796	682	597	619	477	434	382	
					FEED	115	150	187	201	198	191	208	192	203	186	



SELECTION GUIDE



SERIES	E9940 GA940	E9A32 GAA32	E9936 GA936	E9A29 GAA29
FLUTE	2	2	2	2
HELIX ANGLE	30°	30°	30°	30°
CUTTING EDGE SHAPE	BALL NOSE	BALL NOSE	SQUARE	SQUARE
SIZE MIN	R0.5	R1.0	D1.0	D1.0
SIZE MAX	R12.5	R12.5	D25.0	D25.0
PAGE	640	641	642	643

CBN
END MILLS

i-Xmill
END MILLS

i-SMART
MODULAR
END MILLS

X5070
END MILLS

4G MILL
END MILLS

X-POWER
PRO
END MILLS

TitaNox-
POWER
END MILLS

JET-POWER
END MILLS

V7 PLUS
END MILLS

ALU-POWER
HPC
END MILLS

ALU-
POWER
END MILLS

D-POWER
GRAPHITE
END MILLS

D-POWER
CFRP
END MILLS

ROUTERS

CRX S
END MILLS

K-2
END MILLS

ONLY ONE
COATED PM60
END MILLS

TANK-
POWER
END MILLS

GENERAL
HSS
END MILLS

MILLING
CUTTERS

TECHNICAL
DATA

HSS-PM

TANK-POWER END MILLS

High Toughness, for Stainless Steels, Carbon steels, Alloy Steels
For General Application, Rough & Finish



Please visit
globalyg1.com/mat
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P 654

	SHORT LENGTH	LONG LENGTH	SHORT LENGTH	LONG LENGTH
	TiAlN based	TiAlN based	TiAlN based	TiAlN based
P	◎	◎	◎	◎
M	◎	◎	◎	◎
K	◎	◎	◎	◎
N	○	○	○	○
S	○	○	○	○
H	○	○	○	○

E9942 GA942	E9A30 GAA30	E9938 GA938	E9A31 GAA31	E9941 GA941	E9A35 GAA35	E9A26 GAA26	E9A33 GAA33	E9A34 GAA34	E9E43 GAE43
3	3	4	4	Multi Flute	Multi Flute	Multi Flute	Multi Flute	Multi Flute	Multi Flute
30°	30°	30°	30°	30°	30°	45°	30°	30°	30°
SQUARE	SQUARE	SQUARE	SQUARE	ROUGHING	ROUGHING	ROUGHING	ROUGHING	ROUGHING	ROUGHING
D1.0	D1.0	D1.0	D2.0	D6.0	D6.0	D4.0	D6.0	D6.0	D10.0
D25.0	D25.0	D25.0	D25.0	D25.0	D25.0	D25.0	D25.0	D25.0	D25.0
644	645	646	647	648	649	650	651	652	653
STUB LENGTH	SHORT LENGTH	SHORT LENGTH	LONG LENGTH	SHORT LENGTH	LONG LENGTH	SHORT LENGTH	SHORT LENGTH	LONG LENGTH	WITH NECK
TiAlN based	TiAlN based	TiAlN based	TiAlN based	X-Coating	X-Coating	X-Coating	X-Coating	X-Coating	X-Coating



⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	1
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	2
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	3
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	4
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	5
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	6 P
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CBN
END MILLS

i-Xmill
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X5070
END MILLS

4G MILL
END MILLS

X-POWER
PRO
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