



Leading Through Innovation



**HSS PM60**



# ONLY ONE COATED PM60 END MILLS

**Only One, beschichtete Pulvermetall PM60 Schaftfräser**

- Perfect Solution of Carbide Chipping under Vibrations
- Perfekte Lösung bei Zerspanung unter Vibrationen

**SELECTION GUIDE**



**COATED PM60  
ONLY ONE  
END MILLS**

Perfect solution to protect Carbide chipping problems under vibrations



◎ : Excellent ○ : Good

Recommended cutting conditions : p. C662

SERIES	GYG77 GYF97	GYG72 GYF99	GYG01
FLUTE	2	2	3
HELIX ANGLE	30°	30°	30°
CUTTING EDGE SHAPE	BALL NOSE	SQUARE	SQUARE
SIZE MIN	R0.5	D1.0	D1.0
SIZE MAX	R12.5	D25.0	D25.0
PAGE	C652	C653	C654
	SHORT LENGTH	SHORT LENGTH	SHORT LENGTH CENTER CUT
	Y-Coating	Y-Coating	Y-Coating



ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRc	GYG77 GYF97	GYG72 GYF99	GYG01	
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	Malleable cast iron	Ferritic	130		◎	◎	◎	
	20		Pearlitic	230	21	◎	◎	◎	
N	21	Aluminum- wrought alloy	Not Curable	60					
	22		Curable Hardened	100					
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable	75					
	24		≤ 12% Si, Curable Hardened	90					
	25		> 12% Si, Not Curable	130					
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%	110		○	○	○	
	27		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		Ni or Co Based	Annealed	250	25			
	34			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	Chilled Cast Iron	Cast	400	42	○	○	○	
	41	Hardened Cast Iron	Hardened	550	55				

GYG74 GYF96	GYG52	GYG76 GYG02	GYF95	GYF94	GYF98	GYG03
4	4	4	Multi Flute	Multi Flute	Multi Flute	Multi Flute
30°	35°/37°	30°	4F: 44°/45° 5F: 44°/44.5°/45°	30°	30°	30°
SQUARE	SQUARE	SQUARE	CORNER RADIUS ROUGHING	ROUGHING	ROUGHING	ROUGHING
D1.0	D3.0	D2.0	D6.0	D6.0	D6.0	D6.0
D25.0	D25.0	D25.0	D25.0	D25.0	D25.0	D25.0
C655	C656	C657	C658	C659	C660	C661
SHORT LENGTH CENTER CUT	SHORT LENGTH CENTER CUT	LONG LENGTH CENTER CUT	SHORT LENGTH CENTER CUT	SHORT LENGTH CENTER CUT	LONG LENGTH CENTER CUT	SHORT LENGTH CENTER CUT
Y-Coating	Y-Coating	Y-Coating	Y-Coating	Y-Coating	Y-Coating	Y-Coating



◎	◎	◎	◎	◎	◎	◎	1
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◎	◎	◎	◎	◎	◎	◎	5
◎	◎	◎	◎	◎	◎	◎	6
◎	◎	◎	◎	◎	◎	◎	7
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◎	◎	◎	◎	◎	◎	◎	10
○	○	○	○	○	○	○	11
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							40
							41



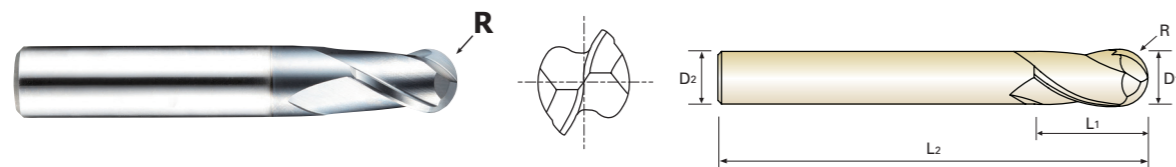


PLAIN SHANK **GYG77** SERIES

FLAT SHANK **GYF97** SERIES

**PM60, 2 FLUTE BALL NOSE SHORT LENGTH**

- PM60, 2 SCHNEIDEN, STIRNRADIUS KURZ
- REVÊTUE YG-ALCRN - PM60, 2 DENTS, SÉRIE COURTE, HÉMISPHERIQUE
- RIVESTITA PM60, 2 TAGLIENTE SERIE CORTA SEMISFERICA



Recommended ToolHolder	Flat Shank	Plain Shank
END MILL HOLDER	POWER MILLING CHUCK	
		ER COLLET CHUCK SK SLIM CHUCK

Unit : mm

EDP No.		Radius of Ball Nose	Mill Diameter	Shank Diameter		Length of Cut	Overall Length
PLAIN	FLAT	R(±0.02)	D1	D2		L1	L2
GYG77010	GYF97010	R0.5	1.0	6		2.5	47
GYG77020	GYF97020	R1.0	2.0	6		4	48
GYG77030	GYF97030	R1.5	3.0	6		5	49
GYG77040	GYF97040	R2.0	4.0	6		7	51
GYG77050	GYF97050	R2.5	5.0	6		8	52
GYG77060	GYF97060	R3.0	6.0	6		8	52
GYG77070	GYF97070	R3.5	7.0	8		10	60
GYG77080	GYF97080	R4.0	8.0	8		11	61
GYG77090	GYF97090	R4.5	9.0	10		11	61
GYG77100	GYF97100	R5.0	10.0	10		13	63
GYG77120	GYF97120	R6.0	12.0	12		16	73
GYG77140	GYF97140	R7.0	14.0	12		16	73
GYG77160	GYF97160	R8.0	16.0	16		19	79
GYG77180	GYF97180	R9.0	18.0	16		19	79
GYG77200	GYF97200	R10.0	20.0	20		22	88
GYG77250	GYF97250	R12.5	25.0	25		26	102

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	38	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																					
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommend						○	○	○													○

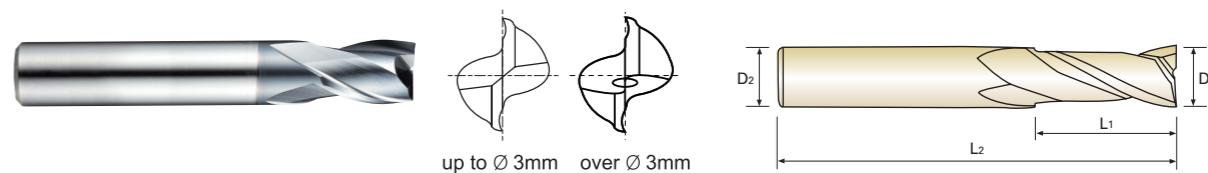


PLAIN SHANK **GYG72** SERIES

FLAT SHANK **GYF99** SERIES

**PM60, 2 FLUTE SHORT LENGTH**

- PM60, 2 SCHNEIDEN, KURZ, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, 2 DENTS, SÉRIE COURTE (COUPE AU CENTRE)
- RIVESTITA PM60, 2 TAGLIENTI SERIE CORTA (TAGLIENTE AL CENTRO)



Recommended ToolHolder	Flat Shank	Plain Shank
END MILL HOLDER	POWER MILLING CHUCK	
		ER COLLET CHUCK SK SLIM CHUCK

Unit : mm

EDP No.		Mill Diameter	Shank Diameter		Length of Cut	Overall Length
PLAIN	FLAT	D1	D2		L1	L2
GYG72010	GYF99010	1.0	6		2.5	47
GYG72020	GYF99020	2.0	6		4	48
GYG72030	GYF99030	3.0	6		5	49
GYG72040	GYF99040	4.0	6		7	51
GYG72050	GYF99050	5.0	6		8	52
GYG72060	GYF99060	6.0	6		8	52
GYG72070	GYF99070	7.0	8		10	60
GYG72080	GYF99080	8.0	8		11	61
GYG72090	GYF99090	9.0	10		11	61
GYG72100	GYF99100	10.0	10		13	63
GYG72120	GYF99120	12.0	12		16	73
GYG72140	GYF99140	14.0	12		16	73
GYG72160	GYF99160	16.0	16		19	79
GYG72180	GYF99180	18.0	16		19	79
GYG72200	GYF99200	20.0	20		22	88
GYG72220	GYF99220	22.0	20		22	88
GYG72250	GYF99250	25.0	25		26	102

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	38	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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

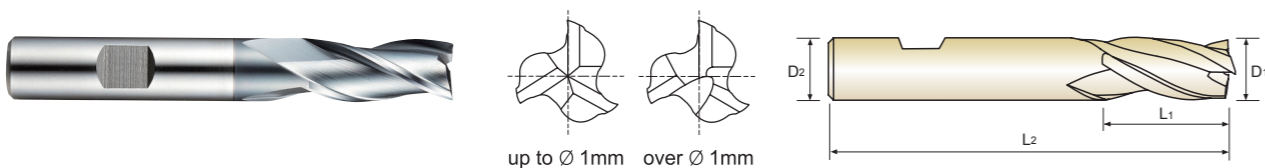
ISO Material Description	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)	Non Metallic Materials		Heat Resistant Super Alloys			Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron						
VDI 3323	21	22	23	24	25	26	27	28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

**YG ONLY ONE**  
COATED PM60 END MILLS

FLAT SHANK **GYG01** SERIES

**PM60, 3 FLUTE SHORT LENGTH (Center Cut)**

- PM60, 3 SCHNEIDEN, KURZ, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, 3 DENTS, SÉRIE COURTE (COUPE AU CENTRE)
- RIVESTITA PM60, 3 TAGLIENTI SERIE CORTA (TAGLIENTE AL CENTRO)



up to Ø 1mm over Ø 1mm

PM 60 3 30° FLAT Coating Y p.C664~C665

Flat Shank	Plain Shank
END MILL HOLDER	POWER MILLING CHUCK
	ER COLLET CHUCK
	SK SLIM CHUCK

Unit : mm

EDP No.	Mill Diameter		Shank Diameter		Length of Cut		Overall Length	
	D1	D2	D2	D1	L1	L2	L2	L1
GYG01010	1.0	6	6	1.0	3	47	47	3
GYG01020	2.0	6	6	2.0	7	51	51	7
GYG01030	3.0	6	6	3.0	8	52	52	8
GYG01040	4.0	6	6	4.0	11	55	55	11
GYG01050	5.0	6	6	5.0	13	57	57	13
GYG01060	6.0	6	6	6.0	13	57	57	13
GYG01070	7.0	8	8	7.0	16	66	66	16
GYG01080	8.0	8	8	8.0	19	69	69	19
GYG01090	9.0	10	10	9.0	19	69	69	19
GYG01100	10.0	10	10	10.0	22	72	72	22
GYG01120	12.0	12	12	12.0	26	83	83	26
GYG01140	14.0	12	12	14.0	26	83	83	26
GYG01160	16.0	16	16	16.0	32	92	92	32
GYG01180	18.0	16	16	18.0	32	92	92	32
GYG01200	20.0	20	20	20.0	38	104	104	38
GYG01220	22.0	20	20	22.0	38	104	104	38
GYG01250	25.0	25	25	25.0	45	121	121	45

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	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 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						○	○	○														○

**YG ONLY ONE**  
COATED PM60 END MILLS

PLAIN SHANK **GYG74** SERIES  
FLAT SHANK **GYF96** SERIES

**PM60, 4 FLUTE SHORT LENGTH (Center Cut)**

- PM60, 4 SCHNEIDEN, KURZ, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, 4 DENTS, SÉRIE COURTE (COUPE AU CENTRE)
- RIVESTITA PM60, 4 TAGLIENTI SERIE CORTA (TAGLIENTE AL CENTRO)



PM 60 4 30° PLAIN FLAT Coating Y p.C666

Flat Shank	Plain Shank
END MILL HOLDER	POWER MILLING CHUCK
	ER COLLET CHUCK
	SK SLIM CHUCK

Unit : mm

EDP No.	Mill Diameter		Shank Diameter		Length of Cut		Overall Length	
	PLAIN	FLAT	D1	D2	L1	L2	L2	L1
GYG74010	GYF96010	1.0	6	6	3	49	49	3
GYG74020	GYF96020	2.0	6	6	7	51	51	7
GYG74030	GYF96030	3.0	6	6	8	52	52	8
GYG74040	GYF96040	4.0	6	6	11	55	55	11
GYG74050	GYF96050	5.0	6	6	13	57	57	13
GYG74060	GYF96060	6.0	6	6	13	57	57	13
GYG74070	GYF96070	7.0	8	8	16	66	66	16
GYG74080	GYF96080	8.0	8	8	19	69	69	19
GYG74090	GYF96090	9.0	10	10	19	69	69	19
GYG74100	GYF96100	10.0	10	10	22	72	72	22
GYG74120	GYF96120	12.0	12	12	26	83	83	26
GYG74140	GYF96140	14.0	12	12	26	83	83	26
GYG74160	GYF96160	16.0	16	16	32	92	92	32
GYG74180	GYF96180	18.0	16	16	32	92	92	32
GYG74200	GYF96200	20.0	20	20	38	104	104	38
GYG74220	GYF96220	22.0	20	20	38	104	104	38
GYG74250	GYF96250	25.0	25	25	45	121	121	45

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	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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

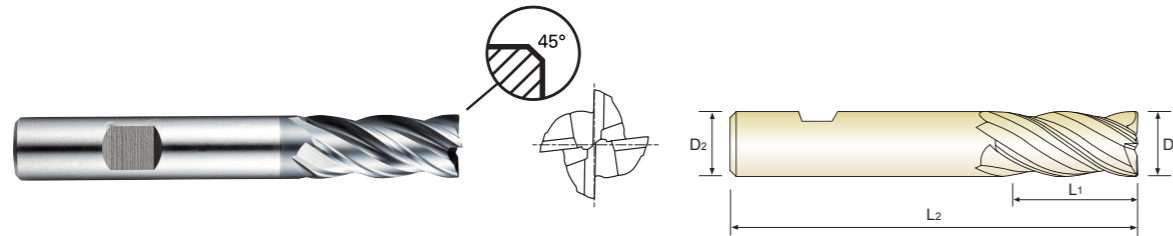
ISO Material Description	N					S					H											
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)	Non Metallic Materials		Heat Resistant Super Alloys			Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron							
VDI 3323	21	22	23	24	25	26	27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

**YG ONLY ONE**  
COATED PM60 END MILLS

FLAT SHANK **GYG52** SERIES

**PM60, 4 FLUTE MULTIPLE HELIX SHORT LENGTH (Center Cut)**

- PM60, 4 SCHNEIDEN, MIT UNGLEICHEM DRALL, KURZ, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, 4 DENTS, HÉLICE MULTIPLE, SÉRIE COURTE (COUPE AU CENTRE)
- RIVESTITA PM60, 4 TAGLIENTI ELICA VARIABILE SERIE CORTA (TAGLIENTE AL CENTRO)



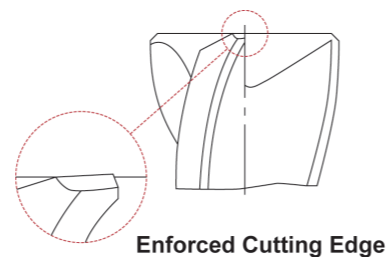
PM 60
4
35°/37°
FLAT
C x 45°
Coating
p.C667

Recommended ToolHolder	Flat Shank	Plain Shank
END MILL HOLDER	END MILL HOLDER	POWER MILLING CHUCK
		ER COLLET CHUCK
		SK SLIM CHUCK

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	Chamfer
	D1	D2	L1	L2	
GYG52030	3.0	6	8	52	0.1
GYG52040	4.0	6	11	55	0.1
GYG52050	5.0	6	13	57	0.1
GYG52060	6.0	6	13	57	0.1
GYG52070	7.0	8	16	66	0.1
GYG52080	8.0	8	19	69	0.1
GYG52090	9.0	10	19	69	0.1
GYG52100	10.0	10	22	72	0.1
GYG52120	12.0	12	26	83	0.1
GYG52140	14.0	12	26	83	0.2
GYG52160	16.0	16	32	92	0.2
GYG52180	18.0	16	32	92	0.2
GYG52200	20.0	20	38	104	0.2
GYG52220	22.0	20	38	104	0.2
GYG52250	25.0	25	45	121	0.2

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	30	29	32	38	35	15	35	15	23	10	10	26	3	25	13	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	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						○	○	○													

**YG ONLY ONE**  
COATED PM60 END MILLS

PLAIN SHANK **GYG76** SERIES  
FLAT SHANK **GYG02** SERIES

**PM60, 4 FLUTE LONG LENGTH (Center Cut)**

- PM60, 4 Schneiden, lang, Zentrumschnitt
- Revêtue YG-AICrN - PM60, 4 dents, série longue (Coupe au centre)
- Rivestita PM60, 4 TAGLIENTI SERIE LUNGA (Tagliente al centro)



PM 60
4
30°
PLAIN
FLAT
Coating
p.C666

Recommended ToolHolder	Flat Shank	Plain Shank
END MILL HOLDER	END MILL HOLDER	POWER MILLING CHUCK
		ER COLLET CHUCK
		SK SLIM CHUCK

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	D1	D2	L1	L2
GYG76020	2.0	6	10	54
GYG76030	3.0	6	12	56
GYG76040	4.0	6	19	63
GYG76050	5.0	6	24	68
GYG76060	6.0	6	24	68
GYG76070	7.0	8	30	80
GYG76080	8.0	8	38	88
GYG76090	9.0	10	38	88
GYG76100	10.0	10	45	95
GYG76120	12.0	12	53	110
GYG76140	14.0	12	53	110
GYG76160	16.0	16	63	123
GYG76180	18.0	16	63	123
GYG76200	20.0	20	75	141
GYG76220	22.0	20	75	141
GYG76250	25.0	25	90	166

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	30	29	32	38	35	15	35	15	23	10	10	26	3	25	13	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

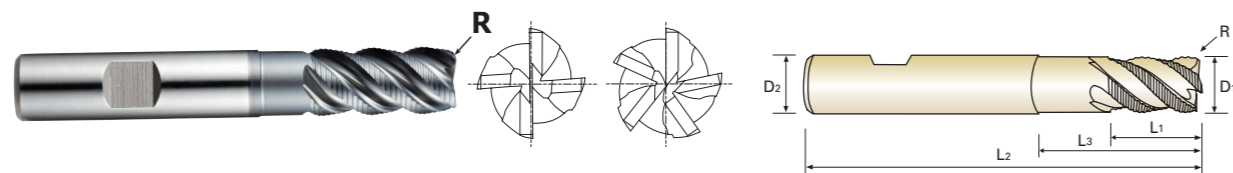
ISO Material Description	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	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						○	○	○													

**YG ONLY ONE**  
COATED PM60 END MILLS

FLAT SHANK **GYF95** SERIES

**PM60, MULTI FLUTE MULTIPLE HELIX SHORT LENGTH CORNER RADIUS ROUGHING - FINE (Center Cut)**

- PM60, MEHRSCHEIDEN, MIT UNGLEICHEM DRALL, KURZ, ECKENRADIUS, FEINKORDEL-SCHRUPPFRÄSER, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, MULTI-DENTS, HÉLICE MULTIPLE, SÉRIE COURTE, RAYONNÉE, RAVAGEUSE, PAS FINS (COUPE AU CENTRE)
- RIVESTITA PM60, MULTI TAGLIENTE ELICA VARIABILE SERIE CORTA TORICA PER SGROSSATURA - BOMBATO FINE (TAGLIENTE AL CENTRO)



PM 60
4-5
44°/44.5°/45°
HR
FLAT
Y Coating
p.C668

Recommended ToolHolder	Flat Shank	Plain Shank
	END MILL HOLDER	POWER MILLING CHUCK
	-	ER COLLET CHUCK SK SLIM CHUCK

Unit : mm

EDP No.	Corner Radius	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall length	No. of Flute
	R	D1(js12)	D2(h6)	L1	L3	L2	
GYF95060	R0.5	6.0	6	13	-	57	4
GYF95070	R0.5	7.0	10	16	-	66	4
GYF95080	R0.5	8.0	10	19	-	69	4
GYF95090	R0.5	9.0	10	19	-	69	4
GYF95100	R0.5	10.0	10	22	31	72	4
GYF95120	R0.5	12.0	12	26	37	83	4
GYF95140	R1.0	14.0	12	26	-	83	5
GYF95160	R1.0	16.0	16	32	44	92	5
GYF95180	R1.0	18.0	16	32	-	92	5
GYF95200	R1.0	20.0	20	38	54	104	5
GYF95250	R1.0	25.0	25	45	63	121	5

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$		
	Nominal-Diameter in mm		
	over 6 to 10	over 10 to 18	over 18 to 30
js12	$\pm 75$	$\pm 90$	$\pm 105$
h6	0 - 9	0 - 11	0 - 13

© : 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	42	48	52	58	62	68	72	78	82	88	92	98	102	108	112
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

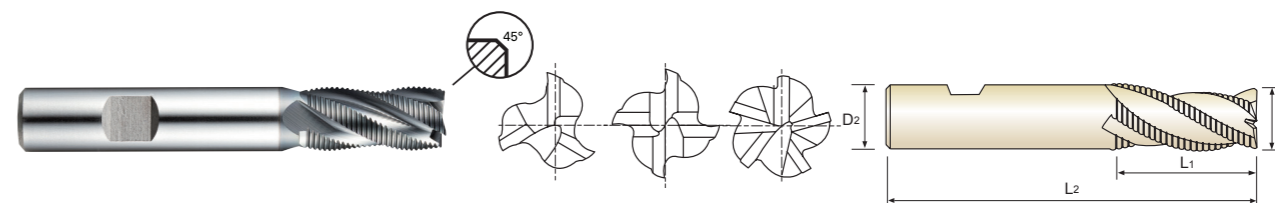
ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
Material Description	21	22	23	24	25	26	27	28	29	30	31	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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**YG ONLY ONE**  
COATED PM60 END MILLS

FLAT SHANK **GYF94** SERIES

**PM60, MULTI FLUTE SHORT LENGTH ROUGHING - FINE (Center Cut)**

- PM60, MEHRSCHEIDEN, KURZ, FEINKORDEL-SCHRUPPFRÄSER, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, MULTI-DENTS, SÉRIE COURTE, RAVAGEUSE, PAS FINS (COUPE AU CENTRE)
- RIVESTITA PM60, MULTI TAGLIENTE SERIE CORTA PER SGROSSATURA - BOMBATO FINE (TAGLIENTE AL CENTRO)



PM 60
3-5
30°
HR
FLAT
C x 45°
Y Coating
p.C669

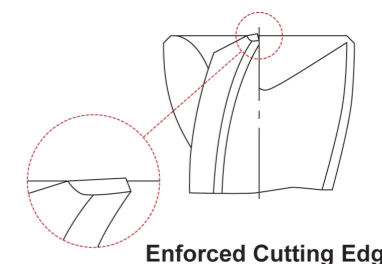
Recommended ToolHolder	Flat Shank	Plain Shank
	END MILL HOLDER	POWER MILLING CHUCK
	-	ER COLLET CHUCK SK SLIM CHUCK

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
	D1(js12)	D2(h6)	L1	L2		
GYF94060	6.0	6	13	57	3	0.18
GYF94070	7.0	10	16	66	3	0.18
GYF94080	8.0	10	19	69	3	0.18
GYF94090	9.0	10	19	69	3	0.18
GYF94100	10.0	10	22	72	4	0.18
GYF94120	12.0	12	26	83	4	0.18
GYF94140	14.0	12	26	83	4	0.25
GYF94160	16.0	16	32	92	4	0.25
GYF94180	18.0	16	32	92	4	0.25
GYF94200	20.0	20	38	104	4	0.25
GYF94250	25.0	25	45	121	5	0.36

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$		
	Nominal-Diameter in mm		
	over 6 to 10	over 10 to 18	over 18 to 30
js12	$\pm 75$	$\pm 90$	$\pm 105$
h6	0 - 9	0 - 11	0 - 13



© : 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	42	48	52	58	62	68	72	78	82	88	92	98	102	108	112
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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

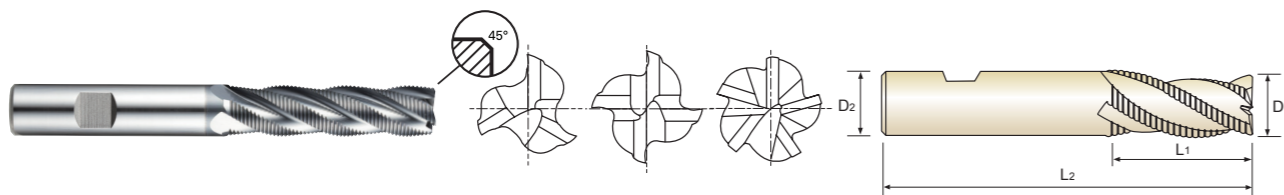




FLAT SHANK **GYF98** SERIES

**PM60, MULTI FLUTE LONG LENGTH ROUGHING - FINE (Center Cut)**

- PM60, MEHRSCHEIDEN, LANG, FEINKORDEL-SCHRUPPFRÄSER, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, MULTI-DENTS, SÉRIE LONGUE, RAVAGEUSE, PAS FINS (COUPE AU CENTRE)
- RIVESTITA PM60, MULTI TAGLIENTE SERIE LUNGA PER SGROSSATURA - BOMBATO FINE (TAGLIENTE AL CENTRO)



PM 60
3-5
30°
HR
FLAT
C x 45°
Coating
p.C669

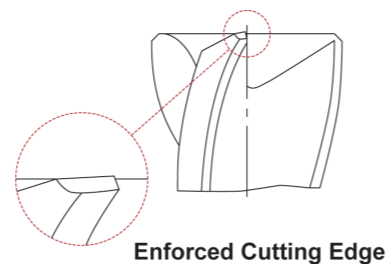
Recommended ToolHolder	Flat Shank	Plain Shank
END MILL HOLDER	END MILL HOLDER	POWER MILLING CHUCK
-	-	ER COLLET CHUCK SK SLIM CHUCK

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
	D1(js12)	D2(h6)	L1	L2		
GYF98060	6.0	6	24	68	3	0.18
GYF98070	7.0	10	30	80	3	0.18
GYF98080	8.0	10	38	88	3	0.18
GYF98090	9.0	10	38	88	3	0.18
GYF98100	10.0	10	45	95	4	0.18
GYF98120	12.0	12	53	110	4	0.18
GYF98140	14.0	12	53	110	4	0.25
GYF98160	16.0	16	63	123	4	0.25
GYF98180	18.0	16	63	123	4	0.25
GYF98200	20.0	20	75	141	4	0.25
GYF98250	25.0	25	90	166	5	0.36

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$		
	Nominal-Diameter in mm		
	over 6 to 10	over 10 to 18	over 18 to 30
js12	$\pm 75$	$\pm 90$	$\pm 105$
h6	0 - 9	0 - 11	0 - 13



◎ : 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	42	45	48	52	55	58	62	65	68	72	75	78	82	85
HB	125	190	250	270	300	350	380	420	450	480	520	550	580	620	650	680	720	750	780	820
Recommend	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

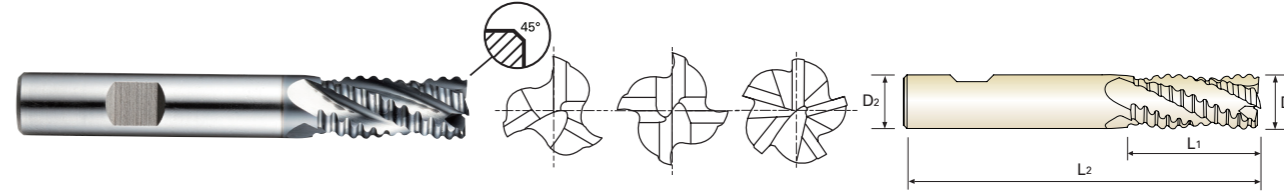
ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
Material Description	21	22	23	24	25	26	27	28	29	30	31	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 **GYG03** SERIES

**PM60, MULTI FLUTE SHORT LENGTH ROUGHING - COARSE (Center Cut)**

- PM60, MEHRSCHEIDEN, KURZ, SCHRUPPFRÄSER, ZENTRUMSCHNITT
- REVÊTUE YG-ALCRN - PM60, MULTI-DENTS, SÉRIE COURTE, RAVAGEUSE, PAS GROSSIERS (COUPE AU CENTRE)
- RIVESTITA PM60, MULTI TAGLIENTE SERIE CORTA PER SGROSSATURA - BOMBATO GROSSO (TAGLIENTE AL CENTRO)



PM 60
3-5
30°
NR
FLAT
C x 45°
Coating
p.C669

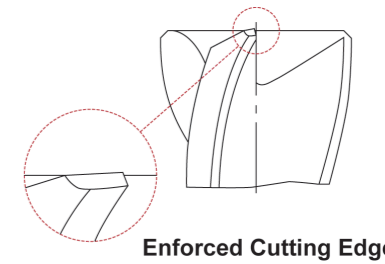
Recommended ToolHolder	Flat Shank	Plain Shank
END MILL HOLDER	END MILL HOLDER	POWER MILLING CHUCK
-	-	ER COLLET CHUCK SK SLIM CHUCK

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute	Chamfer
	D1(js12)	D2(h6)	L1	L2		
GYG03060	6.0	6	13	57	3	0.25
GYG03070	7.0	10	16	66	3	0.25
GYG03080	8.0	10	19	69	3	0.25
GYG03090	9.0	10	19	69	3	0.36
GYG03100	10.0	10	22	72	4	0.36
GYG03120	12.0	12	26	83	4	0.56
GYG03140	14.0	12	26	83	4	0.6
GYG03160	16.0	16	32	92	4	0.6
GYG03180	18.0	16	32	92	4	0.6
GYG03200	20.0	20	38	104	4	0.6
GYG03250	25.0	25	45	121	5	0.6

**Tolerances according to DIN 7160 & 7161**

	Tolerance range in $\mu\text{m}$		
	Nominal-Diameter in mm		
	over 6 to 10	over 10 to 18	over 18 to 30
js12	$\pm 75$	$\pm 90$	$\pm 105$
h6	0 - 9	0 - 11	0 - 13



◎ : 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	42	45	48	52	55	58	62	65	68	72	75	78	82	85
HB	125	190	250	270	300	350	380	420	450	480	520	550	580	620	650	680	720	750	780	820
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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

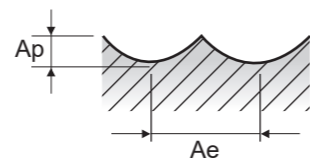
**YG** ONLY ONE COATED PM60 END MILLS

**RECOMMENDED CUTTING CONDITIONS  
EMPFOHLENE SCHNEIDPARAMETER**

**GYG77, GYF97 SERIES 2 FLUTE BALL NOSE**

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

Table with columns: ISO, VDI 3323, Material Description, Ae, Ap, Parameter, and Diameter (Ø) ranging from 3.0 to 25.0. Rows include materials like Non-alloy steel, Low alloy steel, High alloyed steel, and Stainless steel.



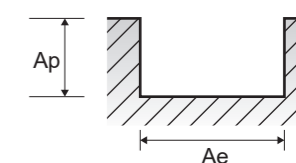
**YG** ONLY ONE COATED PM60 END MILLS

**RECOMMENDED CUTTING CONDITIONS  
EMPFOHLENE SCHNEIDPARAMETER**

**GYG72, GYF99 SERIES 2 FLUTE - SLOTTING**

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

Table with columns: ISO, VDI 3323, Material Description, Ae, Ap, Parameter, and Diameter (Ø) ranging from 2.0 to 25.0. Rows include materials like Non-alloy steel, Low alloy steel, High alloyed steel, and Stainless steel.







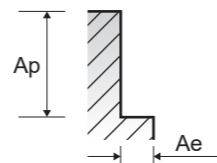


RECOMMENDED CUTTING CONDITIONS
EMPFOLHENE SCHNEIDPARAMETER

GYG74, GYF96, GYG76, GYG02 SERIES 4 FLUTE - SIDE CUTTING

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

Main data table for GYG74, GYF96, GYG76, GYG02 series with columns for ISO, VDI, Material, Ae, Ap, Parameter, Diameter (Ø), and cutting parameters (Vc, fz, RPM, FEED) for diameters from 2.0 to 25.0.

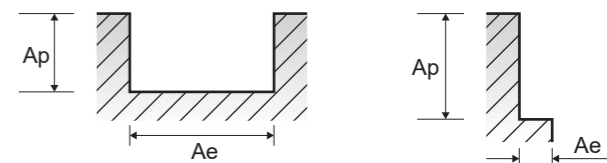


RECOMMENDED CUTTING CONDITIONS
EMPFOLHENE SCHNEIDPARAMETER

GYG52 SERIES 4 FLUTE - SLOTTING, SIDE CUTTING

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

Main data table for GYG52 series with columns for ISO, VDI, Material, Slotting, Side Cutting, Ae, Ap, Parameter, Diameter (Ø), and cutting parameters (Vc, fz, RPM, FEED) for diameters from 3.0 to 25.0.



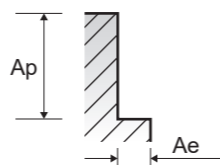
**YG** ONLY ONE COATED PM60 END MILLS

**RECOMMENDED CUTTING CONDITIONS  
EMPFOLHENE SCHNEIDPARAMETER**

**GYF95 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	25.0	
P	1	Non-alloy steel	0.5D	1.5D	Vc	76	87	86	87	89	87	85	87	90	
					fz	0.02	0.03	0.055	0.065	0.059	0.069	0.079	0.088	0.105	
					RPM	4032	3462	2737	2308	2024	1731	1503	1385	1146	
	2		Vc	60	69	68	65	66	69	72	68	68			
			fz	0.021	0.03	0.053	0.069	0.063	0.069	0.074	0.087	0.106			
			RPM	3183	2745	2165	1724	1501	1373	1273	1082	866			
	3		Vc	43	51	47	49	48	48	50	48	47			
			fz	0.018	0.028	0.046	0.063	0.061	0.069	0.075	0.086	0.107			
			RPM	2281	2029	1496	1300	1091	955	884	764	598			
	4		Vc	43	51	47	49	48	48	50	48	47			
			fz	0.018	0.028	0.046	0.063	0.061	0.069	0.075	0.086	0.107			
			RPM	2281	2029	1496	1300	1091	955	884	764	598			
5	Vc	35	38	40	40	40	40	40	40	41					
	fz	0.02	0.03	0.045	0.061	0.057	0.066	0.073	0.081	0.1					
	RPM	1857	1512	1273	1061	909	796	707	637	522					
6	Vc	60	69	68	65	66	69	72	68	68					
	fz	0.021	0.03	0.053	0.069	0.063	0.069	0.074	0.087	0.106					
	RPM	3183	2745	2165	1724	1501	1373	1273	1082	866					
7	Vc	43	51	47	49	48	48	50	48	47					
	fz	0.018	0.028	0.046	0.063	0.061	0.069	0.075	0.086	0.107					
	RPM	2281	2029	1496	1300	1091	955	884	764	598					
8-9	Vc	35	38	40	40	40	40	40	40	41					
	fz	0.02	0.03	0.045	0.061	0.057	0.066	0.073	0.081	0.1					
	RPM	1857	1512	1273	1061	909	796	707	637	522					
10	Vc	60	69	68	65	66	69	72	68	68					
	fz	0.021	0.03	0.053	0.069	0.063	0.069	0.074	0.087	0.106					
	RPM	3183	2745	2165	1724	1501	1373	1273	1082	866					
11.1	Vc	35	38	40	40	40	40	40	40	41					
	fz	0.02	0.03	0.045	0.061	0.057	0.066	0.073	0.081	0.1					
	RPM	1857	1512	1273	1061	909	796	707	637	522					
11.2	Vc	25	27	28	28	28	28	28	28	28					
	fz	0.02	0.029	0.044	0.06	0.056	0.065	0.072	0.08	0.1					
	RPM	1326	1074	891	743	637	557	495	446	357					
M	14.1	Stainless steel	0.5D	1.5D	Vc	39	43	43	43	44	45	44	44		
					fz	0.019	0.03	0.045	0.064	0.059	0.069	0.075	0.084	0.104	
					RPM	2069	1711	1369	1141	1000	855	796	700	560	
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.5D	1.5D	Vc	60	69	68	65	66	69	72	68	68	
					fz	0.021	0.03	0.053	0.069	0.063	0.069	0.074	0.087	0.106	
					RPM	3183	2745	2165	1724	1501	1373	1273	1082	866	
H	40	Chilled Cast Iron	0.3D	1.5D	Vc	25	27	28	28	28	28	28	28	28	
					fz	0.02	0.029	0.044	0.06	0.056	0.065	0.072	0.08	0.1	
					RPM	1326	1074	891	743	637	557	495	446	357	



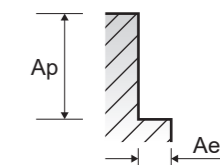
**YG** ONLY ONE COATED PM60 END MILLS

**RECOMMENDED CUTTING CONDITIONS  
EMPFOLHENE SCHNEIDPARAMETER**

**GYF94, GYF98, GYG03 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	25.0	
P	1	Non-alloy steel	0.5D	1.5D	Vc	63	72	72	72	74	72	71	72	75	
					fz	0.027	0.041	0.055	0.065	0.074	0.087	0.099	0.111	0.105	
					RPM	3342	2865	2292	1910	1682	1432	1256	1146	955	
	2		Vc	50	57	57	54	55	57	61	57	57			
			fz	0.027	0.04	0.053	0.069	0.078	0.087	0.092	0.109	0.106			
			RPM	2653	2268	1814	1432	1251	1134	1079	907	726			
	3-4		Vc	36	42	40	41	40	40	41	40	39			
			fz	0.024	0.038	0.047	0.064	0.076	0.087	0.094	0.107	0.106			
			RPM	1910	1671	1273	1088	909	796	725	637	497			
	5		Vc	29	32	34	34	33	33	33	33	34			
			fz	0.027	0.04	0.044	0.06	0.071	0.081	0.091	0.101	0.1			
			RPM	1538	1273	1082	902	750	657	584	525	433			
6	Vc	50	57	57	54	55	57	61	57	57					
	fz	0.027	0.04	0.053	0.069	0.078	0.087	0.092	0.109	0.106					
	RPM	2653	2268	1814	1432	1251	1134	1079	907	726					
7	Vc	36	42	40	41	40	40	41	40	39					
	fz	0.024	0.038	0.047	0.064	0.076	0.087	0.094	0.107	0.106					
	RPM	1910	1671	1273	1088	909	796	725	637	497					
8-9	Vc	29	32	34	34	33	33	33	33	34					
	fz	0.027	0.04	0.044	0.06	0.071	0.081	0.091	0.101	0.1					
	RPM	1538	1273	1082	902	750	657	584	525	433					
10	Vc	50	57	57	54	55	57	61	57	57					
	fz	0.027	0.04	0.053	0.069	0.078	0.087	0.092	0.109	0.106					
	RPM	2653	2268	1814	1432	1251	1134	1079	907	726					
11.1	Vc	29	32	34	34	33	33	33	33	34					
	fz	0.027	0.04	0.044	0.06	0.071	0.081	0.091	0.101	0.1					
	RPM	1538	1273	1082	902	750	657	584	525	433					
11.2	Vc	21	22	24	23	23	23	23	23	24					
	fz	0.028	0.04	0.045	0.06	0.071	0.082	0.091	0.101	0.1					
	RPM	1114	875	764	610	523	458	407	366	306					
M	14.1	Stainless steel	0.5D	1.5D	Vc	33	36	36	36	37	36	37	36	37	
					fz	0.025	0.039	0.045	0.064	0.074	0.085	0.093	0.106	0.102	
					RPM	1751	1432	1146	955	841	716	654	573	471	
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.5D	1.5D	Vc	50	57	57	54	55	57	61	57	57	
					fz	0.027	0.04	0.053	0.069	0.078	0.087	0.092	0.109	0.106	
					RPM	2653	2268	1814	1432	1251	1134	1079	907	726	
H	40	Chilled Cast Iron	0.3D	1.5D	Vc	21	22	24	23	23	23	23	23	24	
					fz	0.028	0.04	0.045	0.06	0.071	0.082	0.091	0.101	0.1	
					RPM	1114	875	764	610	523	458	407	366	306	







Global Cutting Tool Leader **YG-1**



# MILLING