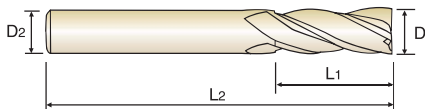


CARBIDE, 4 FLUTE MULTIPLE HELIX (Sharp corner removal)

- **VOLLHARTMETALL, 4 SCHNEIDEN MEHRSPIRAL (Scharfe Schneidenecken entfernt)**
- **Fraise carbure, 4 dents, hélice multiple (Protection de l'angle d'attaque)**
- **MD, 4 TAGLIANTI, TAGLIENTE RINFORZATO**

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
 - ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
 - ▶ Multiple Helix for 3.0mm and over 3.0mm diameter endmills minimizing vibration and decreasing wear in cutting.
 - Equal index flutes design for long length and single helix (38°) end mills.
 - ▶ Gash land geometry applied at the end tooth, achieving heavy duty cutting.
 - ▶ Available various length products like short, regular and long length end mills etc.
 - ▶ Available in short, regular and long shank end mills.
- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeometrien hervorragende Schnittleistung und Verschleißfestigkeit
 - ▶ Ausgezeichnet geeignet für das Fräsen von vorvergütetem Stahl, kohlenstoff Stahl, legiertem Stahl für Formen, bis HRC55 und Maschinenbauteile.
 - ▶ Aufgrund der Multi-Helix (M-Helix) bei Schaftfräsern $\geq 3,0\text{mm } \phi$ werden Vibrationen zuverlässig verhindert und gleichzeitig der Schneidkantenverschleiß verringert.
 - Designed mit gleichgeteilten Spannuten für überlange Schaftfräser.
 - ▶ Aufgrund der korrigierten Stirnschneiden ist eine Scherzerspannung möglich.
 - ▶ Erhältlich in verschiedenen Variationen: kurz, lang und extra lang.



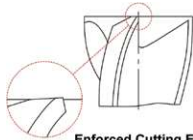
D< ϕ 3, Long Length 38° HELIX

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	Remark
	D1	D2	L1	L2	
SEME71025124SE	2.5	4	12	50	4mm Shank
SEME71025025E	2.5	6	2.5	40	Short
SEME7102505E	2.5	6	5	40	Short
★ SEME71025E	2.5	6	7	50	Regular
SEME7102510E	2.5	6	10	50	Long
SEME7102512E	2.5	6	12	50	Long
SEME7103003E	3.0	6	3	40	Short
SEME7103006E	3.0	6	6	40	Short
★ SEME71030E	3.0	6	8	50	Regular
SEME7103010E	3.0	6	10	50	Long
SEME7103012E	3.0	6	12	50	Long
SEME7103014E	3.0	6	14	50	Long
SEME7104004E	4.0	6	4	40	Short
SEME7104008E	4.0	6	8	40	Short
★ SEME71040E	4.0	6	10	50	Regular
SEME7104012E	4.0	6	12	50	Long
SEME7104014E	4.0	6	14	50	Long
SEME7104016E	4.0	6	16	50	Long
SEME7105005E	5.0	6	5	50	Short
SEME7105010E	5.0	6	10	50	Short
★ SEME71050E	5.0	6	15	60	Regular
SEME7105020E	5.0	6	20	60	Long
SEME7105025E	5.0	6	25	60	Long
SEME7106006E	6.0	6	6	50	Short

★ : Stock Item

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5



Enforced Cutting Edge

▶ NEXT PAGE

◎ : Excellent ○ : Good

ISO Material Description	P											M				K					
	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRC		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		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																		○	◎	◎	○



4G MILL END MILLS

PLAIN SHANK

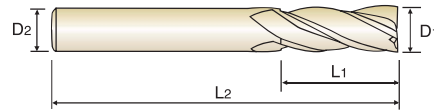
SEME71 SERIES

CARBIDE, 4 FLUTE MULTIPLE HELIX (Sharp corner removal)

- **VOLLHARTMETALL, 4 SCHNEIDEN MEHRSPIRAL (Scharfe Schneidenecken entfernt)**
- () **Fraise carbure, 4 dents, hélice multiple (Protection de l'angle d'attaque)**
- () **MD, 4 TAGLIENTI, TAGLIENTE RINFORZATO**

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- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
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- ▶ Gash land geometry applied at the end tooth, achieving heavy duty cutting.
- ▶ Available various length products like short, regular and long length end mills etc.
- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeometrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Ausgezeichnet geeignet für das Fräsen von vorvergütetem Stahl, kohlenstoff Stahl, legiertem Stahl für Formen, bis HRC55 und Maschinenbauteile.
- ▶ Aufgrund der Multi-Helix (M-Helix) bei Schaftfräsern $\geq 3,0\text{mm } \varnothing$ werden Vibrationen zuverlässig verhindert und gleichzeitig der Schneidkantenverschleiß verringert.
- Designed mit gleichgeteilten Spannten für überlange Schaftfräser.
- ▶ Aufgrund der korrigierten Stirmschneiden ist eine Schwerkraftspannung möglich.
- ▶ Erhältlich in verschiedenen Variationen: kurz, lang und extra lang.



CARBIDE 4 35°/38° PLAIN P.326-329

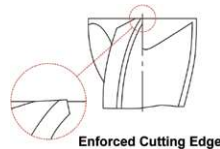
D\varnothing3, Long Length 38° HELIX

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	Remark
	D1	D2	L1	L2	
SEME7106012E	6.0	6	12	50	Short
★ SEME71060E	6.0	6	15	60	Regular
SEME7106020E	6.0	6	20	60	Long
SEME7106025E	6.0	6	25	60	Long
SEME7108016E	8.0	8	16	60	Short
★ SEME71080E	8.0	8	20	70	Regular
SEME7108025E	8.0	8	25	70	Long
SEME7108030E	8.0	8	30	70	Long
★ SEME7110022E	10.0	10	22	65	Short
★ SEME71100E	10.0	10	25	75	Regular
★ SEME7110030E	10.0	10	30	75	Long
★ SEME7110035E	10.0	10	35	75	Long
SEME7112026E	12.0	12	26	70	Short
★ SEME71120E	12.0	12	30	80	Regular
★ SEME7112035E	12.0	12	35	80	Long
★ SEME7112040E	12.0	12	40	80	Long
SEME71140E	14.0	16	35	100	Regular
★ SEME7116032E	16.0	16	32	100	Short
★ SEME71160E	16.0	16	40	100	Regular
SEME71180E	18.0	20	45	100	Regular
★ SEME71200E	20.0	20	45	100	Regular

★ : Stock Item

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5



◎ : 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	10	29	32	38	15	35	15	23	10	15	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	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	15	30	25	38	34	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																○	○	◎	○		

YG 4G MILL END MILLS

PLAIN SHANK

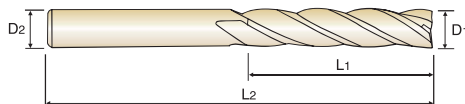
SEME72 SERIES

CARBIDE, 4 FLUTE LONG LENGTH

- **VOLLHARTMETALL, 4 SCHNEIDEN LANG**
- **Fraise carbure, 4 dents, longue**
- **MD, 4 TAGLIANTI, SPIGOLO VIVO, SERIE LUNGA**

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeometrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Hervorragende Leistung bei der Zerspaltung von vorvergüteten Stählen bis HRC55, welche im Werkzeug- und Formenbau Verwendung finden.
- ▶ Erhältlich in verschiedenen Schneiden- und Gesamtlängen.



CARBIDE 4 30° PLAIN P.330-335

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	D1	D2	L1	L2
★ SEME7201003E	1.0	6	3	60
★ SEME7201004E	1.0	6	4	60
★ SEME7201005E	1.0	6	5	60
★ SEME7201006E	1.0	6	6	60
SEME7201007E	1.0	6	7	60
★ SEME7201008E	1.0	6	8	60
SEME7201010E	1.0	6	10	60
SEME7201012E	1.0	6	12	60
SEME7201204E	1.2	6	4	60
SEME7201206E	1.2	6	6	60
SEME7201208E	1.2	6	8	60
SEME7201210E	1.2	6	10	60
SEME7201212E	1.2	6	12	60
★ SEME7201506E	1.5	6	6	60
★ SEME7201508E	1.5	6	8	60
SEME7201510E	1.5	6	10	60
SEME7201512E	1.5	6	12	60
SEME7201514E	1.5	6	14	60
SEME7201516E	1.5	6	16	60
★ SEME7202008E	2.0	6	8	60
★ SEME7202010E	2.0	6	10	60
★ SEME7202012E	2.0	6	12	60
★ SEME7202014E	2.0	6	14	60
★ SEME7202016E	2.0	6	16	60

★ : Stock Item

▶ NEXT PAGE

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5

◎ : Excellent ○ : Good

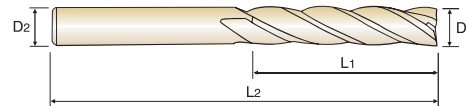
ISO Material Description	P											M			K						
	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		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																		○	◎	◎	○

CARBIDE, 4 FLUTE LONG LENGTH

- VOLLHARTMETALL, 4 SCHNEIDEN LANG
- Fraise carbure, 4 dents, longue
- MD, 4 TAGLIENTI, SPIGOLO VIVO, SERIE LUNGA

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeometrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Hervorragende Leistung bei der Zerspaltung von vorvergüteten Stählen bis HRC55, welche im Werkzeug- und Formenbau Verwendung finden.
- ▶ Erhältlich in verschiebenen Schneiden- und Gesamtlängen.



CARBIDE 4 30° PLAIN P.330-335

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	D1	D2	L1	L2
★ SEME7202510E	2.5	6	10	60
★ SEME7202512E	2.5	6	12	60
SEME7202516E	2.5	6	16	60
SEME7202520E	2.5	6	20	60
SEME7202526E	2.5	6	26	60
SEME72030163SE	3.0	3	16	100
★ SEME7203010E	3.0	6	10	70
★ SEME7203012E	3.0	6	12	70
★ SEME7203014E	3.0	6	14	70
★ SEME7203016E	3.0	6	16	70
★ SEME7203020E	3.0	6	20	70
★ SEME7203026E	3.0	6	26	70
★ SEME7203030E	3.0	6	30	70
★ SEME72040204SE	4.0	4	20	100
★ SEME7204012E	4.0	6	12	70
★ SEME7204016E	4.0	6	16	70
★ SEME7204020E	4.0	6	20	70
★ SEME7204026E	4.0	6	26	70
★ SEME7204030E	4.0	6	30	70
★ SEME7205020E	5.0	6	20	70
★ SEME7205025E	5.0	6	25	70
★ SEME7205025100E	5.0	6	25	100
★ SEME7205030E	5.0	6	30	80
★ SEME7205035E	5.0	6	35	90

★ : Stock Item

▶ NEXT PAGE

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5

◎ : Excellent ○ : Good

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

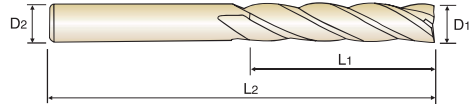
ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRC	15	30	25	38	34	15	30	25	38	34	200	280	250	350	320	400 Rm	1050 Rm	550	630	42	55
HB	60	100	75	90	130	110	90	100										400	550	400	550
Recommend																		○	◎	◎	○

CARBIDE, 4 FLUTE LONG LENGTH

- **VOLLHARTMETALL, 4 SCHNEIDEN LANG**
- **Fraise carbure, 4 dents, longue**
- **MD, 4 TAGLIANTI, SPIGOLO VIVO, SERIE LUNGA**

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- ▶ Hervorragende Leistung bei der Zerspaltung von vorvergüteten Stählen bis HRc55, welche im Werkzeug- und Formenbau Verwendung finden.
- ▶ Erhältlich in verschiedenen Schneiden- und Gesamtlängen.



CARBIDE 4 30° PLAIN P.330-335

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	D1	D2	L1	L2
★ SEME7205040E	5.0	6	40	100
★ SEME7206015E	6.0	6	15	60
★ SEME7206015080E	6.0	6	15	80
★ SEME7206020E	6.0	6	20	70
★ SEME7206020090E	6.0	6	20	90
★ SEME7206025E	6.0	6	25	75
★ SEME7206030E	6.0	6	30	80
★ SEME7206030100E	6.0	6	30	100
★ SEME7206030150E	6.0	6	30	150
★ SEME7206035E	6.0	6	35	90
★ SEME7206040E	6.0	6	40	90
★ SEME7206040120E	6.0	6	40	120
★ SEME7206045E	6.0	6	45	150
★ SEME7208025E	8.0	8	25	80
★ SEME7208030E	8.0	8	30	80
★ SEME7208030100E	8.0	8	30	100
★ SEME7208035E	8.0	8	35	90
★ SEME7208040E	8.0	8	40	90
★ SEME7208040120E	8.0	8	40	120
★ SEME7208040150E	8.0	8	40	150
★ SEME7208045E	8.0	8	45	100
★ SEME7208050E	8.0	8	50	100
★ SEME7208050150E	8.0	8	50	150
★ SEME7210030E	10.0	10	30	80

★ : Stock Item

▶ NEXT PAGE

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5

◎ : Excellent ○ : Good

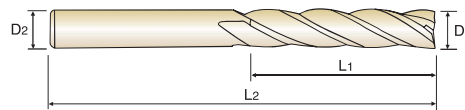
ISO Material Description	P											M			K						
	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		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																		○	◎	◎	○

CARBIDE, 4 FLUTE LONG LENGTH

- **VOLLHARTMETALL, 4 SCHNEIDEN LANG**
- **Fraise carbure, 4 dents, longue**
- **MD, 4 TAGLIENTI, SPIGOLO VIVO, SERIE LUNGA**

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- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeometrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Hervorragende Leistung bei der Zerspaltung von vorvergüteten Stählen bis HRC55, welche im Werkzeug- und Formenbau Verwendung finden.
- ▶ Erhältlich in verschiebenen Schneiden- und Gesamtlängen.



CARBIDE

4

30°

PLAIN

P.330-335

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	D1	D2	L1	L2
★ SEME7210030100E	10.0	10	30	100
★ SEME7210035E	10.0	10	35	90
★ SEME7210040E	10.0	10	40	90
★ SEME7210040120E	10.0	10	40	120
★ SEME7210045E	10.0	10	45	100
★ SEME7210050E	10.0	10	50	100
★ SEME7210050150E	10.0	10	50	150
SEME7210050200E	10.0	10	50	200
★ SEME7210055E	10.0	10	55	150
★ SEME7210060E	10.0	10	60	110
SEME7210060200E	10.0	10	60	200
★ SEME7212035E	12.0	12	35	90
★ SEME7212040E	12.0	12	40	100
★ SEME7212040120E	12.0	12	40	120
★ SEME7212045E	12.0	12	45	130
★ SEME7212050E	12.0	12	50	100
★ SEME7212050150E	12.0	12	50	150
★ SEME7212055E	12.0	12	55	110
★ SEME7212060E	12.0	12	60	110
★ SEME7212060150E	12.0	12	60	150
SEME7212060200E	12.0	12	60	200
SEME7212065E	12.0	12	65	150
SEME7212070E	12.0	12	70	120
SEME7212070200E	12.0	12	70	200

★ : Stock Item

▶ NEXT PAGE

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5

◎ : Excellent ○ : Good

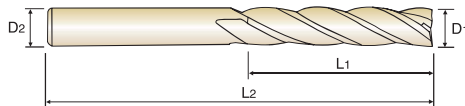
ISO Material Description	P										M				K												
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron						
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20							
HRC	13	25	28	32	10	29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

CARBIDE, 4 FLUTE LONG LENGTH

- **VOLLHARTMETALL, 4 SCHNEIDEN LANG**
- **Fraise carbure, 4 dents, longue**
- **MD, 4 TAGLIANTI, SPIGOLO VIVO, SERIE LUNGA**

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeometrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Hervorragende Leistung bei der Zerspaltung von vorvergüteten Stählen bis HRC55, welche im Werkzeug- und Formenbau Verwendung finden.
- ▶ Erhältlich in verschiedenen Schneiden- und Gesamtlängen.



CARBIDE 4 30° PLAIN P.330-335

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	D1	D2	L1	L2
★ SEME7214050E	14.0	16	50	110
★ SEME7214060E	14.0	16	60	150
SEME7216040E	16.0	16	40	150
★ SEME7216050E	16.0	16	50	110
SEME7216050150E	16.0	16	50	150
★ SEME7216060E	16.0	16	60	120
★ SEME7216070E	16.0	16	70	130
★ SEME7216070150E	16.0	16	70	150
SEME7216070200E	16.0	16	70	200
SEME7216080E	16.0	16	80	150
SEME7216090E	16.0	16	90	150
SEME72160110E	16.0	16	110	200
SEME72160120E	16.0	16	120	250
SEME7218050E	18.0	20	50	120
SEME7218070E	18.0	20	70	130
SEME72180100E	18.0	20	100	200
★ SEME7220050E	20.0	20	50	110
SEME7220050150E	20.0	20	50	150
★ SEME7220060E	20.0	20	60	130
★ SEME7220070E	20.0	20	70	130
SEME7220080E	20.0	20	80	150
★ SEME7220090E	20.0	20	90	150
★ SEME7220090200E	20.0	20	90	200
SEME72200110E	20.0	20	110	200

★ : Stock Item

▶ NEXT PAGE

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5

◎ : Excellent ○ : Good

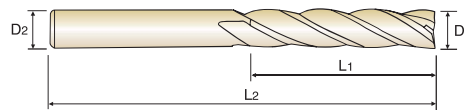
ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		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																		○	◎	◎	○

CARBIDE, 4 FLUTE LONG LENGTH

- **VOLLHARTMETALL, 4 SCHNEIDEN LANG**
- **Fraise carbure, 4 dents, longue**
- **MD, 4 TAGLIENTI, SPIGOLO VIVO, SERIE LUNGA**

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- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeometrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Hervorragende Leistung bei der Zerspaltung von vorvergüteten Stählen bis HRC55, welche im Werkzeug- und Formenbau Verwendung finden.
- ▶ Erhältlich in verschiebenen Schneiden- und Gesamtlängen.



CARBIDE

4

30°

PLAIN

P.330-335

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
	D1	D2	L1	L2
★ SEME72200120E	20.0	20	120	250
SEME7222075E	22.0	20	75	150
SEME72220110E	22.0	20	110	200
SEME7225070E	25.0	25	70	150
★ SEME7225090E	25.0	25	90	150
SEME72250110E	25.0	25	110	200
SEME72250120E	25.0	25	120	250

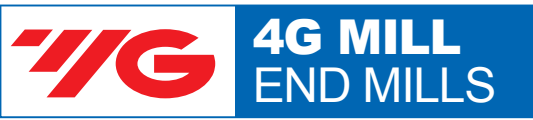
★ : Stock Item

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.03	h5

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRC	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	42	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																		○	◎	◎	○

◎ : Excellent ○ : Good



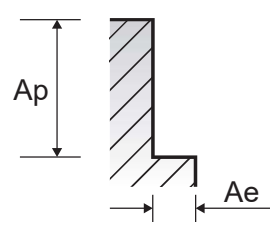
RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

SEME72 SERIES 4 FLUTE - SIDE CUTTING

Vc = m/min. fz = mm/tooth
RPM = rev./min. FEED = mm/min.
LOC = Length of Cut

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)															
						1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.2				
						LOC 3	4	5	6	7	8	10	12	4	6	8	10				
P	1-5	Non-alloy steel	0.05D	2.5D	Vc	60	60	60	54	54	54	54	48	61	61	55	55				
					fz	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002				
	RPM	19099	19099	19099	17189	17189	17189	17189	15279	16181	16181	14589	14589								
	FEED	153	153	153	138	138	138	138	122	194	194	175	117								
	6-8	Low alloy steel	0.05D	2.5D	Vc	60	60	60	54	54	54	54	48	61	61	55	55				
fz					0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002					
RPM					19099	19099	19099	17189	17189	17189	17189	15279	16181	16181	14589	14589					
9	High alloyed steel, and tool steel	0.05D	2.5D	Vc	34	34	34	31	31	31	31	28	35	35	31	31					
				fz	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002					
				RPM	10823	10823	10823	9868	9868	9868	9868	8913	9284	9284	8223	8223					
10-11.1	High alloyed steel, and tool steel	0.05D	2.5D	Vc	60	60	60	54	54	54	54	48	61	61	55	55					
				fz	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002					
				RPM	19099	19099	19099	17189	17189	17189	17189	15279	16181	16181	14589	14589					
11.2	High alloyed steel, and tool steel	0.05D	2.5D	Vc	34	34	34	31	31	31	31	28	35	35	31	31					
				fz	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002					
				RPM	10823	10823	10823	9868	9868	9868	9868	8913	9284	9284	8223	8223					
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.05D	2.5D	Vc	60	60	60	54	54	54	54	48	61	61	55	55				
					fz	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002				
					RPM	19099	19099	19099	17189	17189	17189	17189	15279	16181	16181	14589	14589				
H	38.1 - 38.2	Hardened steel	0.02D	2.0D	Vc	21	21	21	19	19	19	19	17	21	21	19	19				
					fz	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002				
	40	Chilled Cast Iron	0.05D	2.5D	Vc	34	34	34	31	31	31	31	28	35	35	31	31				
fz					0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002					
RPM					10823	10823	10823	9868	9868	9868	9868	8913	9284	9284	8223	8223					
41	Hardened Cast Iron	0.02D	2.0D	Vc	21	21	21	19	19	19	19	17	21	21	19	19					
				fz	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001					
				RPM	6685	6685	6685	6048	6048	6048	6048	5411	5570	5570	5040	5040					

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YG 4G MILL END MILLS

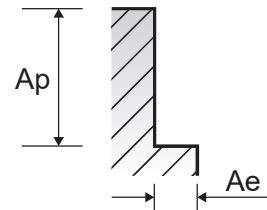
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDPARAMETER

SEME72 SERIES 4 FLUTE - SIDE CUTTING

Vc = m/min. fz = mm/tooth
RPM = rev./min. FEED = mm/min.
LOC = Length of Cut

VDI 3323	Parameter	Diameter (Ø)																		
		1.2	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5	2.5	3.0	3.0
	LOC	12	6	8	10	12	14	16	8	10	12	14	16	10	12	16	20	26	10	12
1-5	Vc	55	65	59	59	59	59	52	66	66	60	60	60	71	71	64	64	57	70	70
	fz	0.002	0.004	0.004	0.004	0.003	0.003	0.003	0.006	0.006	0.005	0.005	0.005	0.007	0.007	0.006	0.006	0.005	0.009	0.009
	RPM	14589	13793	12520	12520	12520	12520	11035	10504	10504	9549	9549	9549	9040	9040	8149	8149	7257	7427	7427
	FEED	117	221	200	200	150	150	132	252	252	191	191	191	253	253	196	196	145	267	267
6-8	Vc	55	65	59	59	59	59	52	66	66	60	60	60	71	71	64	64	57	70	70
	fz	0.002	0.004	0.004	0.004	0.003	0.003	0.003	0.006	0.006	0.005	0.005	0.005	0.007	0.007	0.006	0.006	0.005	0.009	0.009
	RPM	14589	13793	12520	12520	12520	12520	11035	10504	10504	9549	9549	9549	9040	9040	8149	8149	7257	7427	7427
	FEED	117	221	200	200	150	150	132	252	252	191	191	191	253	253	196	196	145	267	267
9	Vc	31	37	33	33	33	33	30	38	38	34	34	34	41	41	37	37	32	40	40
	fz	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.004	0.004	0.004	0.004	0.003	0.005	0.005	0.005	0.004	0.004	0.007	0.007
	RPM	8223	7852	7003	7003	7003	7003	6366	6048	6048	5411	5411	5411	5220	5220	4711	4711	4074	4244	4244
	FEED	66	94	84	56	56	56	51	97	97	87	87	87	65	104	104	94	75	65	119
10 - 11.1	Vc	55	65	59	59	59	59	52	66	66	60	60	60	71	71	64	64	57	70	70
	fz	0.002	0.004	0.004	0.004	0.003	0.003	0.003	0.006	0.006	0.005	0.005	0.005	0.007	0.007	0.006	0.006	0.005	0.009	0.009
	RPM	14589	13793	12520	12520	12520	12520	11035	10504	10504	9549	9549	9549	9040	9040	8149	8149	7257	7427	7427
	FEED	117	221	200	200	150	150	132	252	252	191	191	191	253	253	196	196	145	267	267
11.2	Vc	31	37	33	33	33	33	30	38	38	34	34	34	41	41	37	37	32	40	40
	fz	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.004	0.004	0.004	0.004	0.003	0.005	0.005	0.005	0.004	0.004	0.007	0.007
	RPM	8223	7852	7003	7003	7003	7003	6366	6048	6048	5411	5411	5411	5220	5220	4711	4711	4074	4244	4244
	FEED	66	94	84	56	56	56	51	97	97	87	87	87	65	104	104	94	75	65	119
15 - 20	Vc	55	65	59	59	59	59	52	66	66	60	60	60	71	71	64	64	57	70	70
	fz	0.002	0.004	0.004	0.004	0.003	0.003	0.003	0.006	0.006	0.005	0.005	0.005	0.007	0.007	0.006	0.006	0.005	0.009	0.009
	RPM	14589	13793	12520	12520	12520	12520	11035	10504	10504	9549	9549	9549	9040	9040	8149	8149	7257	7427	7427
	FEED	117	221	200	200	150	150	132	252	252	191	191	191	253	253	196	196	145	267	267
38.1 - 38.2	Vc	19	23	20	20	20	20	18	24	24	21	21	21	25	25	23	23	20	25	25
	fz	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.004	0.003	0.003	0.003	0.005	0.005	0.004	0.004	0.003	0.006	0.006
	RPM	5040	4881	4244	4244	4244	4244	3820	3820	3820	3342	3342	3342	3183	3183	2928	2928	2546	2653	2653
	FEED	20	39	34	34	34	34	31	61	61	40	40	40	64	64	47	47	31	64	64
40	Vc	31	37	33	33	33	33	30	38	38	34	34	34	41	41	37	37	32	40	40
	fz	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.004	0.004	0.004	0.004	0.003	0.005	0.005	0.005	0.004	0.004	0.007	0.007
	RPM	8223	7852	7003	7003	7003	7003	6366	6048	6048	5411	5411	5411	5220	5220	4711	4711	4074	4244	4244
	FEED	66	94	84	56	56	56	51	97	97	87	87	87	65	104	104	94	75	65	119
41	Vc	19	23	20	20	20	20	18	24	24	21	21	21	25	25	23	23	20	25	25
	fz	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.004	0.003	0.003	0.003	0.005	0.005	0.004	0.004	0.003	0.006	0.006
	RPM	5040	4881	4244	4244	4244	4244	3820	3820	3820	3342	3342	3342	3183	3183	2928	2928	2546	2653	2653
	FEED	20	39	34	34	34	34	31	61	61	40	40	40	64	64	47	47	31	64	64

▶ NEXT PAGE



HSS

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

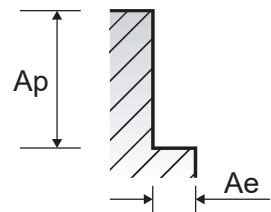
TECHNICAL
DATA

SEME72 SERIES 4 FLUTE - SIDE CUTTING

Vc = m/min. fz = mm/tooth
RPM = rev./min. FEED = mm/min.
LOC = Length of Cut

ISO	VDI 3323	Ae	Ap	Parameter	Diameter (Ø)															
					3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	
P	1-5	0.05D	2.5D	LOC	14	16	20	26	30	12	16	20	26	30	20	25	30	35	40	
				Vc	70	63	63	63	63	75	75	75	68	68	80	80	72	72	72	
				fz	0.009	0.009	0.008	0.008	0.008	0.014	0.014	0.014	0.013	0.013	0.021	0.021	0.019	0.019	0.017	
	6-8	0.05D	2.5D	RPM	7427	6685	6685	6685	6685	5968	5968	5968	5411	5411	5093	5093	4584	4584	4584	
				FEED	267	241	214	214	214	334	334	334	281	281	428	428	348	348	312	
				Vc	70	63	63	63	63	75	75	75	68	68	80	80	72	72	72	
	9	0.05D	2.5D	fz	0.009	0.009	0.008	0.008	0.008	0.014	0.014	0.014	0.013	0.013	0.021	0.021	0.019	0.019	0.017	
				RPM	7427	6685	6685	6685	6685	5968	5968	5968	5411	5411	5093	5093	4584	4584	4584	
				FEED	267	241	214	214	214	334	334	334	281	281	428	428	348	348	312	
	10-11.1	0.05D	2.5D	Vc	40	36	36	36	36	43	43	43	39	39	46	46	41	41	41	
				fz	0.007	0.007	0.006	0.006	0.006	0.01	0.01	0.01	0.009	0.009	0.015	0.015	0.013	0.013	0.011	
				RPM	4244	3820	3820	3820	3820	3422	3422	3422	3104	3104	2928	2928	2610	2610	2610	
11.2	0.05D	2.5D	FEED	119	107	92	92	92	137	137	137	112	112	176	176	136	136	115		
			Vc	70	63	63	63	63	75	75	75	68	68	80	80	72	72	72		
			fz	0.009	0.009	0.008	0.008	0.008	0.014	0.014	0.014	0.013	0.013	0.021	0.021	0.019	0.019	0.017		
K	15-20	0.05D	2.5D	RPM	7427	6685	6685	6685	6685	5968	5968	5968	5411	5411	5093	5093	4584	4584	4584	
				FEED	267	241	214	214	214	334	334	334	281	281	428	428	348	348	312	
				Vc	25	22	22	22	22	27	27	27	24	24	30	30	27	27	27	
H	38.1 - 38.2	0.02D	2.0D	fz	0.006	0.006	0.006	0.005	0.005	0.008	0.008	0.008	0.008	0.008	0.011	0.011	0.01	0.01	0.009	
				RPM	2653	2334	2334	2334	2334	2149	2149	2149	1910	1910	1910	1910	1719	1719	1719	
				FEED	64	56	56	47	47	69	69	69	61	61	84	84	69	69	62	
H	40	0.05D	2.5D	Vc	40	36	36	36	36	43	43	43	39	39	46	46	41	41	41	
				fz	0.007	0.007	0.006	0.006	0.006	0.01	0.01	0.01	0.009	0.009	0.015	0.015	0.013	0.013	0.011	
				RPM	4244	3820	3820	3820	3820	3422	3422	3422	3104	3104	2928	2928	2610	2610	2610	
H	41	0.02D	2.0D	FEED	119	107	92	92	92	137	137	137	112	112	176	176	136	136	115	
				Vc	25	22	22	22	22	27	27	27	24	24	30	30	27	27	27	
				fz	0.006	0.006	0.006	0.005	0.005	0.008	0.008	0.008	0.008	0.008	0.011	0.011	0.01	0.01	0.009	
H	41	0.02D	2.0D	RPM	2653	2334	2334	2334	2334	2149	2149	2149	1910	1910	1910	1910	1719	1719	1719	
				FEED	64	56	56	47	47	69	69	69	61	61	84	84	69	69	62	

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YG 4G MILL END MILLS

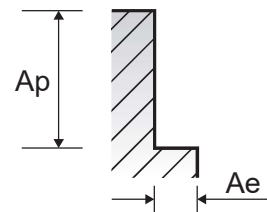
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDPARAMETER

SEME72 SERIES 4 FLUTE - SIDE CUTTING

Vc = m/min. fz = mm/tooth
RPM = rev./min. FEED = mm/min.
LOC = Length of Cut

VDI 3323	Parameter	Diameter (Ø)																			
		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0	10.0	10.0	10.0	10.0
	LOC	15	20	25	30	35	40	45	25	30	35	40	45	50	30	35	40	45	50	55	
1-5	Vc	83	83	83	83	75	75	75	84	84	84	84	84	76	76	89	89	89	89	80	
	fz	0.029	0.029	0.029	0.025	0.025	0.022	0.022	0.041	0.041	0.041	0.035	0.035	0.031	0.049	0.049	0.049	0.049	0.042	0.041	
	RPM	4403	4403	4403	4403	3979	3979	3979	3342	3342	3342	3342	3342	3024	3024	2833	2833	2833	2833	2546	
6-8	FEED	511	511	511	440	398	350	350	548	548	548	468	423	375	555	555	555	555	476	418	
	Vc	83	83	83	83	75	75	75	84	84	84	84	84	76	76	89	89	89	89	80	
	fz	0.029	0.029	0.029	0.025	0.025	0.022	0.022	0.041	0.041	0.041	0.035	0.035	0.031	0.049	0.049	0.049	0.049	0.042	0.041	
9	RPM	4403	4403	4403	4403	3979	3979	3979	3342	3342	3342	3342	3024	3024	2833	2833	2833	2833	2833	2546	
	FEED	511	511	511	440	398	350	350	548	548	548	468	423	375	555	555	555	555	476	418	
	Vc	48	48	48	48	43	43	43	48	48	48	48	48	43	43	52	52	52	52	46	
10 - 11.1	fz	0.021	0.021	0.021	0.018	0.018	0.016	0.016	0.028	0.028	0.028	0.024	0.024	0.021	0.033	0.033	0.033	0.033	0.028	0.028	
	RPM	2546	2546	2546	2546	2281	2281	2281	1910	1910	1910	1910	1711	1711	1655	1655	1655	1655	1655	1464	
	FEED	214	214	214	183	164	146	146	214	214	214	183	164	144	218	218	218	218	185	164	
11.2	Vc	48	48	48	48	43	43	43	48	48	48	48	48	43	43	52	52	52	52	46	
	fz	0.021	0.021	0.021	0.018	0.018	0.016	0.016	0.028	0.028	0.028	0.024	0.024	0.021	0.033	0.033	0.033	0.033	0.028	0.028	
	RPM	2546	2546	2546	2546	2281	2281	2281	1910	1910	1910	1910	1711	1711	1655	1655	1655	1655	1655	1464	
15 - 20	FEED	214	214	214	183	164	146	146	214	214	214	183	164	144	218	218	218	218	185	164	
	Vc	83	83	83	83	75	75	75	84	84	84	84	84	76	76	89	89	89	89	80	
	fz	0.029	0.029	0.029	0.025	0.025	0.022	0.022	0.041	0.041	0.041	0.035	0.035	0.031	0.049	0.049	0.049	0.049	0.042	0.041	
38.1 - 38.2	RPM	4403	4403	4403	4403	3979	3979	3979	3342	3342	3342	3342	3024	3024	2833	2833	2833	2833	2833	2546	
	FEED	511	511	511	440	398	350	350	548	548	548	468	423	375	555	555	555	555	476	418	
	Vc	31	31	31	31	28	28	28	32	32	32	32	32	28	28	32	32	32	32	29	
40	fz	0.017	0.017	0.017	0.014	0.014	0.013	0.013	0.022	0.022	0.022	0.018	0.018	0.017	0.027	0.027	0.027	0.027	0.022	0.022	
	RPM	1645	1645	1645	1645	1485	1485	1485	1273	1273	1273	1273	1114	1114	1019	1019	1019	1019	1019	923	
	FEED	112	112	112	92	83	77	77	112	112	112	92	85	76	110	110	110	110	90	85	
41	Vc	48	48	48	48	43	43	43	48	48	48	48	48	43	43	52	52	52	52	46	
	fz	0.021	0.021	0.021	0.018	0.018	0.016	0.016	0.028	0.028	0.028	0.024	0.024	0.021	0.033	0.033	0.033	0.033	0.028	0.028	
	RPM	2546	2546	2546	2546	2281	2281	2281	1910	1910	1910	1910	1711	1711	1655	1655	1655	1655	1655	1464	
41	FEED	214	214	214	183	164	146	146	214	214	214	183	164	144	218	218	218	218	185	164	
	Vc	31	31	31	31	28	28	28	32	32	32	32	32	28	28	32	32	32	32	29	
	fz	0.017	0.017	0.017	0.014	0.014	0.013	0.013	0.022	0.022	0.022	0.018	0.018	0.017	0.027	0.027	0.027	0.027	0.022	0.022	
41	RPM	1645	1645	1645	1645	1485	1485	1485	1273	1273	1273	1273	1114	1114	1019	1019	1019	1019	1019	923	
	FEED	112	112	112	92	83	77	77	112	112	112	92	85	76	110	110	110	110	90	85	

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HSS

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

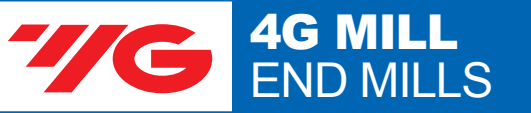
ONLY ONE
COATED PM60
END MILLS

TANK-
POWER
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GENERAL
HSS
END MILLS

MILLING
CUTTERS

TECHNICAL
DATA



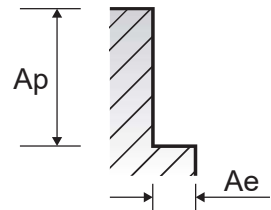
RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

SEME72 SERIES 4 FLUTE - SIDE CUTTING

Vc = m/min. fz = mm/tooth
RPM = rev./min. FEED = mm/min.
LOC = Length of Cut

ISO	VDI 3323	Ae	Ap	Parameter	Diameter (Ø)															
					10.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	14.0	14.0	16.0	16.0	16.0	16.0	
					LOC	60	35	40	45	50	55	60	65	70	50	60	40	50	60	70
P	1-5	0.05D	2.5D	Vc	80	87	87	87	87	87	87	87	78	78	93	93	98	98	98	98
				fz	0.037	0.047	0.047	0.04	0.04	0.04	0.04	0.035	0.035	0.035	0.041	0.041	0.05	0.05	0.042	0.042
				RPM	2546	2308	2308	2308	2308	2308	2308	2308	2069	2069	2114	2114	1950	1950	1950	1950
	6-8	0.05D	2.5D	Vc	80	87	87	87	87	87	87	87	78	78	93	93	98	98	98	98
				fz	0.037	0.047	0.047	0.04	0.04	0.04	0.04	0.035	0.035	0.035	0.041	0.041	0.05	0.05	0.042	0.042
				RPM	2546	2308	2308	2308	2308	2308	2308	2308	2069	2069	2114	2114	1950	1950	1950	1950
	9	0.05D	2.5D	Vc	46	52	52	52	52	52	52	47	47	54	54	54	54	54	54	
				fz	0.024	0.034	0.034	0.03	0.03	0.03	0.026	0.026	0.026	0.029	0.029	0.035	0.035	0.03	0.03	
				RPM	1464	1379	1379	1379	1379	1379	1379	1379	1247	1247	1228	1228	1074	1074	1074	1074
	10-11.1	0.05D	2.5D	Vc	80	87	87	87	87	87	87	87	78	78	93	93	98	98	98	98
				fz	0.037	0.047	0.047	0.04	0.04	0.04	0.035	0.035	0.035	0.041	0.041	0.05	0.05	0.042	0.042	
				RPM	2546	2308	2308	2308	2308	2308	2308	2308	2069	2069	2114	2114	1950	1950	1950	1950
11.2	0.05D	2.5D	Vc	46	52	52	52	52	52	52	47	47	54	54	54	54	54	54		
			fz	0.024	0.034	0.034	0.03	0.03	0.03	0.026	0.026	0.026	0.029	0.029	0.035	0.035	0.03	0.03		
			RPM	1464	1379	1379	1379	1379	1379	1379	1379	1247	1247	1228	1228	1074	1074	1074	1074	
K	15-20	0.05D	2.5D	Vc	80	87	87	87	87	87	87	78	78	93	93	98	98	98	98	
				fz	0.037	0.047	0.047	0.04	0.04	0.04	0.035	0.035	0.035	0.041	0.041	0.05	0.05	0.042	0.042	
				RPM	2546	2308	2308	2308	2308	2308	2308	2308	2069	2069	2114	2114	1950	1950	1950	1950
H	38.1 - 38.2	0.02D	2.0D	Vc	29	32	32	32	32	32	32	29	29	33	33	34	34	34	34	
				fz	0.021	0.025	0.025	0.021	0.021	0.021	0.019	0.018	0.018	0.021	0.021	0.026	0.026	0.022	0.022	
				RPM	923	849	849	849	849	849	849	849	769	769	750	750	676	676	676	676
H	40	0.05D	2.5D	Vc	46	52	52	52	52	52	52	47	47	54	54	54	54	54	54	
				fz	0.024	0.034	0.034	0.03	0.03	0.03	0.026	0.026	0.026	0.029	0.029	0.035	0.035	0.03	0.03	
				RPM	1464	1379	1379	1379	1379	1379	1379	1379	1247	1247	1228	1228	1074	1074	1074	1074
H	41	0.02D	2.0D	Vc	29	32	32	32	32	32	32	29	29	33	33	34	34	34	34	
				fz	0.021	0.025	0.025	0.021	0.021	0.021	0.019	0.018	0.018	0.021	0.021	0.026	0.026	0.022	0.022	
				RPM	923	849	849	849	849	849	849	849	769	769	750	750	676	676	676	676

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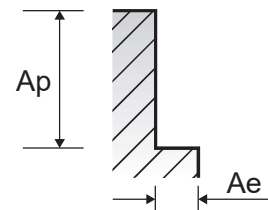
YG 4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDPARAMETER

SEME72 SERIES 4 FLUTE - SIDE CUTTING

Vc = m/min. fz = mm/tooth
RPM = rev./min. FEED = mm/min.
LOC = Length of Cut

VDI 3323	Parameter	Diameter (Ø)																			
		16.0	16.0	16.0	16.0	18.0	18.0	18.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	22.0	22.0	25.0	25.0	25.0	25.0
	LOC	80	90	110	120	50	70	100	50	60	70	80	90	110	120	75	110	70	90	110	120
1-5	Vc	98	88	88	88	95	95	85	89	89	89	89	89	80	80	87	87	86	86	86	86
	fz	0.037	0.037	0.037	0.037	0.049	0.042	0.037	0.048	0.048	0.041	0.041	0.036	0.036	0.036	0.041	0.036	0.049	0.042	0.042	0.036
	RPM	1950	1751	1751	1751	1680	1680	1503	1416	1416	1416	1416	1416	1416	1273	1273	1259	1259	1095	1095	1095
6-8	Vc	98	88	88	88	95	95	85	89	89	89	89	89	80	80	87	87	86	86	86	86
	fz	0.037	0.037	0.037	0.037	0.049	0.042	0.037	0.048	0.048	0.041	0.041	0.036	0.036	0.036	0.041	0.036	0.049	0.042	0.042	0.036
	RPM	1950	1751	1751	1751	1680	1680	1503	1416	1416	1416	1416	1416	1416	1273	1273	1259	1259	1095	1095	1095
9	Vc	54	48	48	48	53	53	48	52	52	52	52	52	46	46	57	57	64	64	64	64
	fz	0.027	0.026	0.026	0.026	0.035	0.029	0.025	0.034	0.034	0.027	0.027	0.024	0.026	0.026	0.027	0.024	0.034	0.027	0.027	0.024
	RPM	1074	955	955	955	937	937	849	828	828	828	828	828	732	732	825	825	815	815	815	815
10 - 11.1	Vc	98	88	88	88	95	95	85	89	89	89	89	89	80	80	87	87	86	86	86	86
	fz	0.037	0.037	0.037	0.037	0.049	0.042	0.037	0.048	0.048	0.041	0.041	0.036	0.036	0.036	0.041	0.036	0.049	0.042	0.042	0.036
	RPM	1950	1751	1751	1751	1680	1680	1503	1416	1416	1416	1416	1416	1416	1273	1273	1259	1259	1095	1095	1095
11.2	Vc	54	48	48	48	53	53	48	52	52	52	52	52	46	46	57	57	64	64	64	64
	fz	0.027	0.026	0.026	0.026	0.035	0.029	0.025	0.034	0.034	0.027	0.027	0.024	0.026	0.026	0.027	0.024	0.034	0.027	0.027	0.024
	RPM	1074	955	955	955	937	937	849	828	828	828	828	828	732	732	825	825	815	815	815	815
15 - 20	Vc	98	88	88	88	95	95	85	89	89	89	89	89	80	80	87	87	86	86	86	86
	fz	0.037	0.037	0.037	0.037	0.049	0.042	0.037	0.048	0.048	0.041	0.041	0.036	0.036	0.036	0.041	0.036	0.049	0.042	0.042	0.036
	RPM	1950	1751	1751	1751	1680	1680	1503	1416	1416	1416	1416	1416	1416	1273	1273	1259	1259	1095	1095	1095
38.1 - 38.2	Vc	34	30	30	30	33	33	30	31	31	31	31	31	28	28	35	35	39	39	39	39
	fz	0.021	0.021	0.021	0.021	0.028	0.023	0.021	0.028	0.028	0.023	0.023	0.02	0.019	0.019	0.023	0.02	0.028	0.023	0.023	0.02
	RPM	676	597	597	597	584	584	531	493	493	493	493	493	446	446	506	506	497	497	497	497
40	Vc	54	48	48	48	53	53	48	52	52	52	52	52	46	46	57	57	64	64	64	64
	fz	0.027	0.026	0.026	0.026	0.035	0.029	0.025	0.034	0.034	0.027	0.027	0.024	0.026	0.026	0.027	0.024	0.034	0.027	0.027	0.024
	RPM	1074	955	955	955	937	937	849	828	828	828	828	828	732	732	825	825	815	815	815	815
41	Vc	34	30	30	30	33	33	30	31	31	31	31	31	28	28	35	35	39	39	39	39
	fz	0.021	0.021	0.021	0.021	0.028	0.023	0.021	0.028	0.028	0.023	0.023	0.02	0.019	0.019	0.023	0.02	0.028	0.023	0.023	0.02
	RPM	676	597	597	597	584	584	531	493	493	493	493	493	446	446	506	506	497	497	497	497
	FEED	289	259	259	259	329	282	222	272	272	232	232	204	183	183	206	181	215	184	184	158
	FEED	116	99	99	99	131	109	85	113	113	89	89	79	76	76	89	79	111	88	88	78
	FEED	116	99	99	99	131	109	85	113	113	89	89	79	76	76	89	79	111	88	88	78
	FEED	57	50	50	50	65	54	45	55	55	45	45	39	34	34	47	41	56	46	46	40
	FEED	57	50	50	50	65	54	45	55	55	45	45	39	34	34	47	41	56	46	46	40



HSS

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