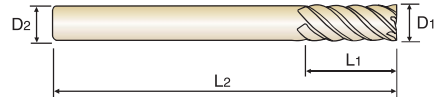


CARBIDE, 6 FLUTE 45° HELIX (Regular, Long Shank)

- VOLLHARTMETALL, 6 SCHNEIDEN 45° RECHTSSPIRALE
- () Fraise carbure, 6 dents, hélice 45°
- () MD, 6 TAGLIENTI, ELICA 45°, SPIGOLO VIVO (Serie media e lunga)

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ From the 45 helix angle, better surface roughness can be achieved at side cutting.
- ▶ Available in several effective lengths of cut and also overall lengths

- ▶ 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.
- ▶ Aufgrund der 45° Spirale werden bessere Oberflächengüten bei der Eckbearbeitung erreicht
- ▶ Erhältlich in verschiedenen gesamt Längen und effektiv Längen.



CARBIDE 6 45° PLAIN P.342-343

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	Remark
	D1	D2	L1	L2	
★ SEME75060E	6.0	6	15	60	Regular
SEME7506020E	6.0	6	20	70	Long
★ SEME7506030E	6.0	6	30	80	Long
SEME7506030110E	6.0	6	30	110	Long
★ SEME75080E	8.0	8	20	70	Regular
★ SEME7508030E	8.0	8	30	80	Long
SEME7508035E	8.0	8	35	90	Long
★ SEME7508040E	8.0	8	40	90	Long
SEME7508040130E	8.0	8	40	130	Long
★ SEME75100E	10.0	10	25	75	Regular
SEME7510030E	10.0	10	30	80	Long
★ SEME7510040E	10.0	10	40	90	Long
SEME7510050E	10.0	10	50	100	Long
SEME7510050150E	10.0	10	50	150	Long
★ SEME75120E	12.0	12	30	80	Regular
★ SEME7512040E	12.0	12	40	90	Long
★ SEME7512050E	12.0	12	50	100	Long
SEME7512060E	12.0	12	60	110	Long
SEME7512060150E	12.0	12	60	150	Long
★ SEME75160E	16.0	16	40	100	Regular
SEME7516050E	16.0	16	50	110	Long
★ SEME7516060E	16.0	16	60	120	Long
SEME7516090E	16.0	16	90	150	Long
SEME75160110E	16.0	16	110	200	Long

★ : 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	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommend	○	○	◎	◎	◎	○	◎	◎	◎	◎	◎				○	○	○	○	○	○	

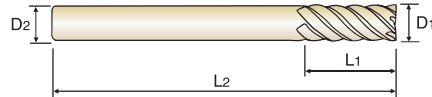
ISO Material Description	N					S										H					
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	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, 6 FLUTE 45° HELIX (Regular, Long Shank)

- **VOLLHARTMETALL, 6 SCHNEIDEN 45° RECHTSSPIRALE**
- **Fraise carbure, 6 dents, hélice 45°**
- **MD, 6 TAGLIANTI, ELICA 45°, SPIGOLO VIVO (Serie media e lunga)**

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
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- ▶ Hervorragende Leistung bei der Zerspannung von vorvergüteten Stählen bis HRC55, welche im Werkzeug- und Formenbau Verwendung finden.
- ▶ Aufgrund der 45° Spirale werden bessere Oberflächengüten bei der Eckbearbeitung erreicht
- ▶ Erhältlich in verschiedenen gesamt Längen und effektiv Längen.



CARBIDE 6 45° PLAIN P.342-343

Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	Remark
	D1	D2	L1	L2	
SEME75160110250E	16.0	16	110	250	Long
★ SEME75200E	20.0	20	45	100	Regular
★ SEME7520060E	20.0	20	60	120	Long
SEME7520070E	20.0	20	70	130	Long
SEME75200110E	20.0	20	110	200	Long
SEME75200110250E	20.0	20	110	250	Long
SEME75200110300E	20.0	20	110	300	Long

★ : 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	130	230		
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			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																		○	◎	◎	○

SEME75 SERIES **6 FLUTE - SIDE CUTTING**

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

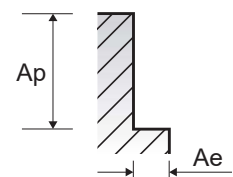
NORMAL SPEED

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)											
						6.0		6.0		8.0		8.0		8.0		10.0	
						LOC	15	20	30	20	30	35	40	25	30	40	
P	1-5	Non-alloy steel	0.1D	1.5D	Vc	110	110	110	111	111	111	111	111	111	111	111	
					fz	0.06	0.06	0.051	0.079	0.079	0.079	0.067	0.099	0.099	0.099		
					RPM	5836	5836	5836	4417	4417	4417	4417	3533	3533	3533		
					FEED	2101	2101	1786	2093	2093	2093	1775	2099	2099	2099		
	6-8	Low alloy steel	0.1D	1.5D	Vc	110	110	110	111	111	111	111	111	111	111	111	
					fz	0.06	0.06	0.051	0.079	0.079	0.079	0.067	0.099	0.099	0.099		
					RPM	5836	5836	5836	4417	4417	4417	4417	3533	3533	3533		
					FEED	2101	2101	1786	2093	2093	2093	1775	2099	2099	2099		
	9	Low alloy steel	0.05D	1.5D	Vc	77	77	77	78	78	78	78	78	76	76	76	
					fz	0.059	0.059	0.05	0.078	0.078	0.078	0.066	0.099	0.099	0.099		
					RPM	4085	4085	4085	3104	3104	3104	3104	2419	2419	2419		
					FEED	1446	1446	1225	1452	1452	1452	1229	1437	1437	1437		
10-11.1	High alloyed steel, and tool steel	0.1D	1.5D	Vc	110	110	110	111	111	111	111	111	111	111	111		
				fz	0.06	0.06	0.051	0.079	0.079	0.079	0.067	0.099	0.099	0.099			
				RPM	5836	5836	5836	4417	4417	4417	4417	3533	3533	3533			
				FEED	2101	2101	1786	2093	2093	2093	1775	2099	2099	2099			
11.2	High alloyed steel, and tool steel	0.05D	1.5D	Vc	77	77	77	78	78	78	78	78	76	76	76		
				fz	0.059	0.059	0.05	0.078	0.078	0.078	0.066	0.099	0.099	0.099			
				RPM	4085	4085	4085	3104	3104	3104	3104	2419	2419	2419			
				FEED	1446	1446	1225	1452	1452	1452	1229	1437	1437	1437			
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.1D	1.5D	Vc	110	110	110	111	111	111	111	111	111	111	111	
					fz	0.06	0.06	0.051	0.079	0.079	0.079	0.067	0.099	0.099	0.099		
					RPM	5836	5836	5836	4417	4417	4417	4417	3533	3533	3533		
					FEED	2101	2101	1786	2093	2093	2093	1775	2099	2099	2099		
H	38.1 - 38.2	Hardened steel	0.05D	1.0D	Vc	31	31	31	31	31	31	31	31	33	33	33	
					fz	0.022	0.022	0.019	0.03	0.03	0.03	0.026	0.035	0.035	0.035		
					RPM	1645	1645	1645	1233	1233	1233	1233	1050	1050	1050		
					FEED	217	217	187	222	222	222	192	221	221	221		
	40	Chilled Cast Iron	0.05D	1.5D	Vc	77	77	77	78	78	78	78	78	76	76	76	
					fz	0.059	0.059	0.05	0.078	0.078	0.078	0.066	0.099	0.099	0.099		
					RPM	4085	4085	4085	3104	3104	3104	3104	2419	2419	2419		
					FEED	1446	1446	1225	1452	1452	1452	1229	1437	1437	1437		
	41	Hardened Cast Iron	0.05D	1.0D	Vc	31	31	31	31	31	31	31	31	33	33	33	
					fz	0.022	0.022	0.019	0.03	0.03	0.03	0.026	0.035	0.035	0.035		
					RPM	1645	1645	1645	1233	1233	1233	1233	1050	1050	1050		
					FEED	217	217	187	222	222	222	192	221	221	221		

HIGH SPEED

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)											
						6.0		6.0		8.0		8.0		8.0		10.0	
						LOC	15	20	30	20	30	35	40	25	30	40	
P	11.2	High alloyed steel, and tool steel	0.05D	1.5D	Vc	333	333	333	333	333	333	333	333	329	329	329	
					fz	0.06	0.06	0.051	0.081	0.081	0.081	0.068	0.1	0.1	0.1		
					RPM	17666	17666	17666	13250	13250	13250	13250	10472	10472	10472		
					FEED	6360	6360	5406	6439	6439	6439	5406	6283	6283	6283		
H	38.1 - 38.2	Hardened steel	0.05D	1.0D	Vc	166	166	166	166	166	166	166	166	166	166	166	
					fz	0.061	0.061	0.051	0.081	0.081	0.081	0.069	0.101	0.101	0.101		
					RPM	8807	8807	8807	6605	6605	6605	6605	5284	5284	5284		
					FEED	3223	3223	2695	3210	3210	3210	2734	3202	3202	3202		
	40	Chilled Cast Iron	0.05D	1.5D	Vc	333	333	333	333	333	333	333	333	329	329	329	
					fz	0.06	0.06	0.051	0.081	0.081	0.081	0.068	0.1	0.1	0.1		
					RPM	17666	17666	17666	13250	13250	13250	13250	10472	10472	10472		
					FEED	6360	6360	5406	6439	6439	6439	5406	6283	6283	6283		
	41	Hardened Cast Iron	0.05D	1.0D	Vc	166	166	166	166	166	166	166	166	166	166	166	
					fz	0.061	0.061	0.051	0.081	0.081	0.081	0.069	0.101	0.101	0.101		
					RPM	8807	8807	8807	6605	6605	6605	6605	5284	5284	5284		
					FEED	3223	3223	2695	3210	3210	3210	2734	3202	3202	3202		

▶ NEXT PAGE



SEME75 SERIES **6 FLUTE - SIDE CUTTING**

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

NORMAL SPEED

VDI 3323	Parameter	Diameter (Ø)													
		10.0	12.0	12.0	12.0	12.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	20.0	20.0
	LOC	50	30	40	50	60	40	50	60	90	110	45	60	70	110
1-5	Vc	111	112	112	112	112	111	111	111	100	100	111	111	111	100
	fz	0.084	0.099	0.099	0.084	0.074	0.1	0.1	0.085	0.075	0.075	0.1	0.1	0.085	0.075
	RPM	3533	2971	2971	2971	2971	2208	2208	2208	1989	1989	1767	1767	1767	1592
	FEED	1781	1765	1765	1497	1319	1325	1325	1126	895	895	1060	1060	901	716
6-8	Vc	111	112	112	112	112	111	111	111	100	100	111	111	111	100
	fz	0.084	0.099	0.099	0.084	0.074	0.1	0.1	0.085	0.075	0.075	0.1	0.1	0.085	0.075
	RPM	3533	2971	2971	2971	2971	2208	2208	2208	1989	1989	1767	1767	1767	1592
	FEED	1781	1765	1765	1497	1319	1325	1325	1126	895	895	1060	1060	901	716
9	Vc	76	79	79	79	79	78	78	78	70	70	77	77	77	68
	fz	0.084	0.097	0.097	0.082	0.073	0.099	0.099	0.085	0.075	0.075	0.099	0.099	0.084	0.075
	RPM	2419	2096	2096	2096	2096	1552	1552	1552	1393	1393	1225	1225	1225	1082
	FEED	1219	1220	1220	1031	918	922	922	791	627	627	728	728	618	487
10 - 11.1	Vc	111	112	112	112	112	111	111	111	100	100	111	111	111	100
	fz	0.084	0.099	0.099	0.084	0.074	0.1	0.1	0.085	0.075	0.075	0.1	0.1	0.085	0.075
	RPM	3533	2971	2971	2971	2971	2208	2208	2208	1989	1989	1767	1767	1767	1592
	FEED	1781	1765	1765	1497	1319	1325	1325	1126	895	895	1060	1060	901	716
11.2	Vc	76	79	79	79	79	78	78	78	70	70	77	77	77	68
	fz	0.084	0.097	0.097	0.082	0.073	0.099	0.099	0.085	0.075	0.075	0.099	0.099	0.084	0.075
	RPM	2419	2096	2096	2096	2096	1552	1552	1552	1393	1393	1225	1225	1225	1082
	FEED	1219	1220	1220	1031	918	922	922	791	627	627	728	728	618	487
15 - 20	Vc	111	112	112	112	112	111	111	111	100	100	111	111	111	100
	fz	0.084	0.099	0.099	0.084	0.074	0.1	0.1	0.085	0.075	0.075	0.1	0.1	0.085	0.075
	RPM	3533	2971	2971	2971	2971	2208	2208	2208	1989	1989	1767	1767	1767	1592
	FEED	1781	1765	1765	1497	1319	1325	1325	1126	895	895	1060	1060	901	716
38.1 - 38.2	Vc	33	33	33	33	33	34	34	34	31	31	33	33	33	30
	fz	0.03	0.036	0.036	0.031	0.027	0.034	0.034	0.029	0.026	0.026	0.037	0.037	0.032	0.028
	RPM	1050	875	875	875	875	676	676	676	617	617	525	525	525	477
	FEED	189	189	189	163	142	138	138	118	96	96	117	117	101	80
40	Vc	76	79	79	79	79	78	78	78	70	70	77	77	77	68
	fz	0.084	0.097	0.097	0.082	0.073	0.099	0.099	0.085	0.075	0.075	0.099	0.099	0.084	0.075
	RPM	2419	2096	2096	2096	2096	1552	1552	1552	1393	1393	1225	1225	1225	1082
	FEED	1219	1220	1220	1031	918	922	922	791	627	627	728	728	618	487
41	Vc	33	33	33	33	33	34	34	34	31	31	33	33	33	30
	fz	0.03	0.036	0.036	0.031	0.027	0.034	0.034	0.029	0.026	0.026	0.037	0.037	0.032	0.028
	RPM	1050	875	875	875	875	676	676	676	617	617	525	525	525	477
	FEED	189	189	189	163	142	138	138	118	96	96	117	117	101	80

HIGH SPEED

VDI 3323	Parameter	Diameter (Ø)													
		10.0	12.0	12.0	12.0	12.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	20.0	20.0
	LOC	50	30	40	50	60	40	50	60	90	110	45	60	70	110
11.2	Vc	329	333	333	333	333	333	333	333	299	299	332	332	332	299
	fz	0.085	0.1	0.1	0.085	0.075	0.1	0.1	0.085	0.075	0.075	0.101	0.101	0.086	0.076
	RPM	10472	8833	8833	8833	8833	6625	6625	6625	5948	5948	5284	5284	5284	4759
	FEED	5341	5300	5300	4505	3975	3975	3975	3379	2677	2677	3202	3202	2727	2170
38.1 - 38.2	Vc	166	166	166	166	166	167	167	167	150	150	166	166	166	150
	fz	0.086	0.1	0.1	0.085	0.075	0.1	0.1	0.085	0.075	0.075	0.097	0.097	0.083	0.073
	RPM	5284	4403	4403	4403	4403	3322	3322	3322	2984	2984	2642	2642	2642	2387
	FEED	2727	2642	2642	2246	1981	1993	1993	1694	1343	1343	1538	1538	1316	1046
40	Vc	329	333	333	333	333	333	333	333	299	299	332	332	332	299
	fz	0.085	0.1	0.1	0.085	0.075	0.1	0.1	0.085	0.075	0.075	0.101	0.101	0.086	0.076
	RPM	10472	8833	8833	8833	8833	6625	6625	6625	5948	5948	5284	5284	5284	4759
	FEED	5341	5300	5300	4505	3975	3975	3975	3379	2677	2677	3202	3202	2727	2170
41	Vc	166	166	166	166	166	167	167	167	150	150	166	166	166	150
	fz	0.086	0.1	0.1	0.085	0.075	0.1	0.1	0.085	0.075	0.075	0.097	0.097	0.083	0.073
	RPM	5284	4403	4403	4403	4403	3322	3322	3322	2984	2984	2642	2642	2642	2387
	FEED	2727	2642	2642	2246	1981	1993	1993	1694	1343	1343	1538	1538	1316	1046

