

# CARBIDE, 2 FLUTE 45° HELIX VOLLHARTMETALL, 2 SCHNEIDEN 45° RECHTSSPIRALE

► Suitable for high speed machining in aluminum and other non-ferrous materials, excellent surface finishes, superior chip removal.

► Zur HSC-Bearbeitung von Aluminium und anderen Nichteisenmetallen.



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
PLAIN	FLAT				
E5522030	E5521030	3.0	6	8	57
E5522040	E5521040	4.0	6	11	57
E5522050	E5521050	5.0	6	13	57
E5522060	E5521060	6.0	6	13	57
E5522080	E5521080	8.0	8	19	63
E5522100	E5521100	10.0	10	22	72
E5522120	E5521120	12.0	12	26	83
E5522140	E5521140	14.0	14	26	83
E5522160	E5521160	16.0	16	32	92
E5522180	E5521180	18.0	18	32	92
E5522200	E5521200	20.0	20	38	104

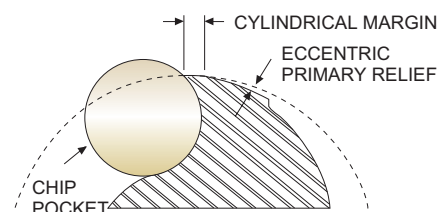
► TiN, TiCN - coating & TiAlN - coating is available on your request.



- High performance in machining aluminum and non-ferrous materials
- Special designed geometry with high rigidity cutting edge
- Improved surface roughness - cylindrical margin which is controlled tightly.
- Excellent chip removal - higher rake angle, higher helix angle(45°), bigger chip pocket.

- Corner radius, Corner chamfer, Neck design is available on your request.
- TiN, TiCN & TiAlN coating is available on your request.

	UNCOATED	TiN	TiCN	TiAlN
PLAIN SHANK	E5522	E6522	EG522	EH522
FLAT SHANK	E5521	E6521	EG521	EH521



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

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels	High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45 HRc45~55	HRc55~70							
					○			◎			

◎ : Excellent ○ : Good

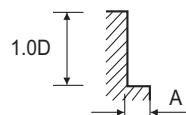
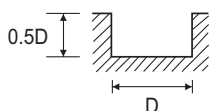


**RECOMMENDED CUTTING CONDITIONS**  
**EMPFOHLENE SCHNEIDKONDITIONEN**

**CARBIDE, 2 FLUTE 45° HELIX**  
**VOLLHARTMETALL, 2 SCHNEIDEN 45° RECHTSSPIRALE**

**E5522, E5521** SERIES

MATERIAL	ALUMINUM LOW SILICON ALUMINUM			
	DIAMETER	RPM	FEED	FEED
	3.0	10000	700	900
	4.0	10000	900	1100
	5.0	10000	1000	1300
	6.0	10000	1200	1500
	8.0	8000	1400	1800
	10.0	8000	1700	2100
	12.0	8000	2100	2600
	14.0	6000	1800	2200
	16.0	6000	1900	2400
	18.0	4000	1400	1800
	20.0	4000	1600	1900



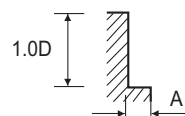
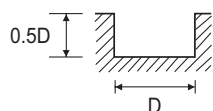
A :  $\varnothing 3 \sim \varnothing 10 = 0.25 \times D$   
 $\varnothing 12 \sim \varnothing 20 = 0.5 \times D$

RPM = rev./min.  
FEED = mm/min.

**CARBIDE, 2 FLUTE 45° HELIX TiCN COATED**  
**VOLLHARTMETALL, 2 SCHNEIDEN 45° RECHTSSPIRALE TiCN-BESCHICHTET**

**EG522, EG521** SERIES

MATERIAL	ALUMINUM LOW SILICON ALUMINUM			
	DIAMETER	RPM	FEED	FEED
	3.0	13000	900	1200
	4.0	13000	1200	1400
	5.0	13000	1300	1700
	6.0	13000	1500	2000
	8.0	10000	1800	2300
	10.0	10000	2200	2700
	12.0	10000	2700	3400
	14.0	8000	2300	2800
	16.0	8000	2500	3100
	18.0	5000	1800	2300
	20.0	5000	2000	2500



A :  $\varnothing 3 \sim \varnothing 10 = 0.25 \times D$   
 $\varnothing 12 \sim \varnothing 20 = 0.5 \times D$

RPM = rev./min.  
FEED = mm/min.