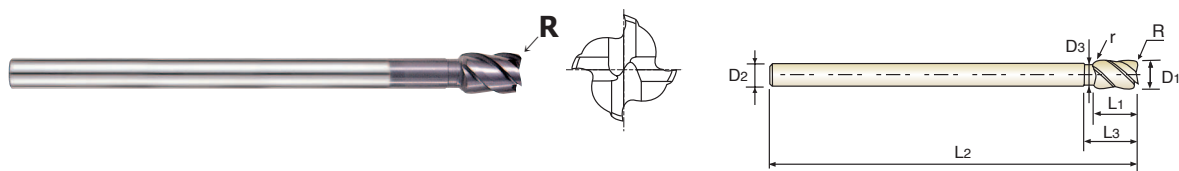


CARBIDE, 4 FLUTE 45° HELIX SHORT LENGTH CORNER RADIUS

VOLLHARTMETALL, 4 SCHNEIDEN 45° RECHTSSPIRALE KURZ ECKENRADIUS

- ▶ No line is marked on the boundary section during step milling because this tool has radius on the end faces of the shank
- ▶ High speed cutting in wide deep wall with step milling
- ▶ Suitable for deep side milling, helical milling, contour milling

- ▶ Hohe Oberflächengüte, auch an den Übergangsf lächen, durch Radien am Auslauf der Schneidkanten.
- ▶ Hochgeschwindigkeitsfräsen auch bei grosser Auskräglänge.
- ▶ Geeignet für tiefes Seitenfräsen, Spiralfräsen und Konturfräsen.



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Unit : mm

EDP No.	Corner Radius	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter
PLAIN	R	D1	D2	L1	L3	L2	D3
EM905100	R0.5	10.0	8	15	19.2	130	7.5
EM905901	R1.0	10.0	8	15	19.2	130	7.5
EM905120	R0.5	12.0	10	18	22.2	150	9.5
EM905902	R1.0	12.0	10	18	22.2	150	9.5
EM905140	R0.5	14.0	12	21	25.2	160	11.5
EM905903	R1.0	14.0	12	21	25.2	160	11.5
EM905180	R0.5	18.0	16	27	31.2	180	15.5
EM905904	R1.0	18.0	16	27	31.2	180	15.5
EM905220	R0.5	22.0	20	33	37.2	200	19.5
EM905905	R1.0	22.0	20	33	37.2	200	19.5

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

◎ : Excellent ○ : Good

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



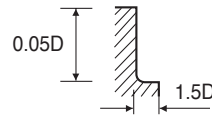
**RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN**

**CARBIDE, 4 FLUTE 45° HELIX CORNER RADIUS - SIDE CUTTING
VOLLHARTMETALL, 4 SCHNEIDEN 45° RECHTSSPIRALE ECKENRADIUS - SEITENFRÄSEN**

EM905 SERIES

MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON				ALLOY STEELS HEAT RESISTANT STEELS				STAINLESS STEELS			
HARDNESS	~ HRC30				HRC30 ~ HRC45							
STRENGTH	~ 1000N/mm ²				1000 ~ 1500N/mm ²							
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	7690	2000	240	0.065	7690	1220	240	0.040	5680	920	180	0.040
12.0	5760	2000	215	0.087	5760	1220	215	0.053	4260	920	160	0.054
14.0	4600	1800	200	0.098	4600	1220	200	0.066	3410	920	150	0.067
18.0	3850	1530	220	0.099	3850	1220	220	0.079	2840	920	160	0.081
22.0	3300	1300	230	0.098	3300	1220	230	0.092	2430	920	170	0.095

MATERIAL	HARDENED STEELS				HARDENED STEELS			
HARDNESS	HRc45 ~ HRc55				HRc55 ~ HRc65			
STRENGTH	1500 ~ 2000N/mm ²				2000N/mm ² ~			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	5680	740	180	0.033	3840	480	120	0.031
12.0	4260	740	160	0.043	2880	480	110	0.042
14.0	3410	740	150	0.054	2300	480	100	0.052
18.0	2840	740	160	0.065	1920	480	110	0.063
22.0	2430	740	170	0.076	1650	480	115	0.073

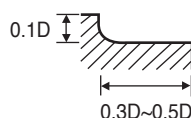


RPM = rev./min.
FEED = mm/min.
Vc = m/min.
fz = mm/t

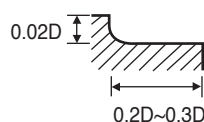
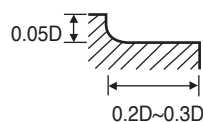
CARBIDE, 4 FLUTE 45° HELIX CORNER RADIUS - CONTOURING VOLLHARTMETALL, 4 SCHNEIDEN 45° RECHTSSPIRALE ECKENRADIUS

EM905 SERIES

MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON				ALLOY STEELS HEAT RESISTANT STEELS				STAINLESS STEELS			
HARDNESS	~ HRC30				HRC30 ~ HRC45							
STRENGTH	~ 1000N/mm ²				1000 ~ 1500N/mm ²							
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	7690	1150	240	0.037	5680	920	180	0.040	5680	800	180	0.035
12.0	5760	1150	215	0.050	4260	920	160	0.054	4260	800	160	0.047
14.0	4600	1150	200	0.063	3410	920	150	0.067	3410	800	150	0.059
18.0	3850	1150	220	0.075	2840	920	160	0.081	2840	800	160	0.070
22.0	3300	1150	230	0.087	2430	920	170	0.095	2430	800	170	0.082



MATERIAL	HARDENED STEELS				HARDENED STEELS			
HARDNESS	HRC45 ~ HRC55				HRC55 ~ HRC65			
STRENGTH	1500 ~ 2000N/mm ²				2000N/mm ² ~			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	5680	460	180	0.020	3840	290	120	0.019
12.0	4260	460	160	0.027	2880	290	110	0.025
14.0	3410	460	150	0.034	2300	290	100	0.032
18.0	2840	460	160	0.040	1920	290	110	0.038
22.0	2430	460	170	0.047	1650	290	115	0.044



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