

CARBIDE

HSS

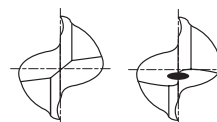


FLAT SHANK  
SEITLICHE MITNAHMEFLÄCHEN  
FLAT SHANK  
SEITLICHE MITNAHMEFLÄCHEN

## PREMIUM HSS-PM, 2 FLUTE SHORT LENGTH PREMIUM HSS-PM, 2 SCHNEIDEN KURZ

- ▶ 2 Flute design for slotting.
- ▶ Suitable for high speed cutting of difficult - to - cut materials.
- ▶ YG-1's new developed TANK-POWER Coating suitable for high speed cutting.

- ▶ 2 Schneiden, Geeignet für Nutenfräsen.
- ▶ Geeignet für Hochgeschwindigkeitsfräsen von schwer zu zerspanenden Materialien.
- ▶ Neuentwickelte Beschichtung für Hochgeschwindigkeitsfräsen.



up to Ø3mm over Ø3mm



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TANK-POWER COATED	e8	h6		
E9936010	GA936010	1.0	6	2.5	47
E9936020	GA936020	2.0	6	4	48
E9936030	GA936030	3.0	6	5	49
E9936040	GA936040	4.0	6	7	51
E9936050	GA936050	5.0	6	8	52
E9936060	GA936060	6.0	6	8	52
E9936070	GA936070	7.0	10	10	60
E9936080	GA936080	8.0	10	11	61
E9936090	GA936090	9.0	10	11	61
E9936100	GA936100	10.0	10	13	63
E9936120	GA936120	12.0	12	16	73
E9936140	GA936140	14.0	12	16	73
E9936160	GA936160	16.0	16	19	79
E9936180	GA936180	18.0	16	19	79
E9936200	GA936200	20.0	20	22	88
E9936220	GA936220	22.0	20	22	88
E9936250	GA936250	25.0	25	26	102

### Tolerances according to DIN 7160 & 7161 Toleranzen nach DIN 7160 & 7161

Tolerance range in $\mu\text{m}$ / Toleranzwerte in $\mu\text{m}$					
Nominal-Diameter in mm / Nennmaßbereich in mm					
	from 1 to 3 von 1 bis 3	over 3 to 6 über 3 bis 6	over 6 to 10 über 6 bis 10	over 10 to 18 über 10 bis 18	over 18 to 30 über 18 bis 30
e8	-14 -28	-20 -38	-25 -47	-32 -59	-40 -73
h6	0 -6	0 -8	0 -9	0 -11	0 -13

MILLING CUTTERS

TECHNICAL DATA

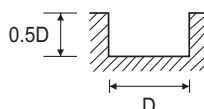
◎ : Excellent ○ : Good

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							
◎	◎	○				○		◎		○		

**PREMIUM HSS-PM, 2 FLUTE - SLOTTING**  
**PREMIUM HSS-PM, 2 SCHNEIDEN - NUTENFRÄSEN**

**GA936, GAA29** SERIES

MATERIAL	STRUCTURAL STEELS CARBON STEELS		STRUCTURAL STEELS CARBON STEELS CAST IRONS		CARBON STEELS ALLOY STEELS TOOL STEELS		PREHARDENED STEELS ALLOY STEELS TOOL STEELS		ALLOY STEELS TOOL STEELS AUSTENITIC STAINLESS STEELS	
HARDNESS	~ 500N/mm <sup>2</sup>		~ HRC20		HRC20 ~ HRC30		HRC30 ~ HRC35		HRC35 ~ HRC40	
STRENGTH	~ 500N/mm <sup>2</sup>		500 ~ 800N/mm <sup>2</sup>		800 ~ 1000N/mm <sup>2</sup>		1000 ~ 1100N/mm <sup>2</sup>		1100 ~ 1300N/mm <sup>2</sup>	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
2.0	7000	115	5900	90	4900	80	3150	65	2000	40
3.0	5000	160	4100	135	3350	115	2300	80	1800	62
4.0	4300	230	3600	175	3150	160	2000	92	1600	75
5.0	3900	255	3250	200	2600	185	1700	102	1350	75
6.0	3500	265	2900	210	2300	190	1450	110	1150	85
8.0	2600	275	2200	240	1800	200	1150	115	890	85
10.0	2100	300	1800	265	1450	230	900	125	700	102
12.0	1800	275	1450	240	1150	210	740	115	580	85
14.0	1600	265	1250	210	1000	195	630	110	500	80
16.0	1350	265	1150	195	890	180	560	102	440	80
18.0	1150	240	950	195	790	160	500	100	400	75
20.0	950	220	780	165	700	150	440	92	360	70
22.0	840	185	710	150	600	125	400	80	320	55
25.0	750	155	630	140	490	115	360	75	250	52

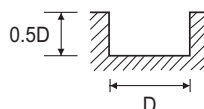


RPM = rev./min.  
FEED = mm/min.

**PREMIUM HSS-PM, 2 FLUTE - SLOTTING**  
**PREMIUM HSS-PM, 2 SCHNEIDEN - NUTENFRÄSEN**

**E9936, E9A29** SERIES

MATERIAL	STRUCTURAL STEELS CARBON STEELS		STRUCTURAL STEELS CARBON STEELS CAST IRONS		CARBON STEELS ALLOY STEELS TOOL STEELS		PREHARDENED STEELS ALLOY STEELS TOOL STEELS		ALLOY STEELS TOOL STEELS AUSTENITIC STAINLESS STEELS	
HARDNESS	~ 500N/mm <sup>2</sup>		~ HRC20		HRC20 ~ HRC30		HRC30 ~ HRC35		HRC35 ~ HRC40	
STRENGTH	~ 500N/mm <sup>2</sup>		500 ~ 800N/mm <sup>2</sup>		800 ~ 1000N/mm <sup>2</sup>		1000 ~ 1100N/mm <sup>2</sup>		1100 ~ 1300N/mm <sup>2</sup>	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
2.0	4800	70	4000	55	3300	50	2100	40	1300	25
3.0	3300	100	2800	85	2200	75	1600	50	1200	40
4.0	2900	140	2400	110	2100	100	1300	60	1050	45
5.0	2600	160	2200	125	1800	115	1100	65	900	45
6.0	2300	160	2000	135	1600	120	1000	65	750	55
8.0	1800	170	1500	150	1200	125	750	70	600	55
10.0	1400	180	1200	165	1000	140	600	80	480	65
12.0	1200	170	1000	150	800	130	500	70	400	55
14.0	1100	160	850	140	680	120	430	65	340	50
16.0	900	160	750	135	600	110	380	65	300	50
18.0	800	150	640	120	530	100	340	55	270	45
20.0	640	130	540	100	480	95	300	55	240	40
22.0	570	110	480	90	400	75	270	50	210	35
25.0	510	95	430	85	340	70	240	45	175	30



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