

CARBIDE

HSS

CBN  
END MILLS

i-Xmill  
END MILLS

X5070  
END MILLS

X-POWER  
END MILLS

JET-POWER  
END MILLS

V7 Mill INOX  
END MILLS

V7 Mill STEEL  
END MILLS

ALU-POWER  
END MILLS

D-POWER  
END MILLS

K-2 CARBIDE  
END MILLS

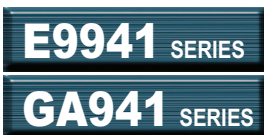
GENERAL  
CARBIDE  
END MILLS

TANK-POWER  
END MILLS

GENERAL  
HSS  
END MILLS

MILLING  
CUTTERS

TECHNICAL  
DATA



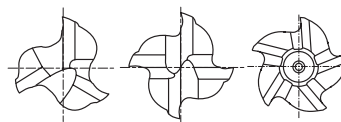
FLAT SHANK  
SEITLICHE MITNAHMEFLÄCHEN

FLAT SHANK  
SEITLICHE MITNAHMEFLÄCHEN

## PREMIUM HSS-PM, MULTI FLUTE SHORT LENGTH ROUGHING - FINE PREMIUM HSS-PM, MULTI SCHNEIDEN KURZ SCHRUPPFRÄSER - FEIN

- ▶ Suitable for high-feed roughing milling.
- ▶ Designed to machine carbon steels, alloyed steels, stainless steels.
- ▶ Providing excellent finished surfaces in many cases.
- ▶ YG-1's new developed TANK-POWER Coating suitable for high speed cutting.
- ▶ up to  $\varnothing 20$  : center cut, over  $\varnothing 20$  : non center cut

- ▶ Geeignet zum HSC - Schrupp - Fräsen.
- ▶ Geeignet zum Fräsen von Stahl, legiertem Stahl und rostfreier Stahl.
- ▶ Liefert in vielen Fällen exzellente bearbeitete Oberflächen.
- ▶ Neuentwickelte Beschichtung für Hochgeschwindigkeitsfräsen.
- ▶ Bis D=20mm : Mit Zentrumschneide, über D=20mm : Ohne Zentrumschneide.



up to  $\varnothing 9$      $\varnothing 10 \sim \varnothing 20$     over  $\varnothing 20$



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
UNCOATED	TANK-POWER COATED	js12	h6			
E9941060	GA941060	6.0	6	13	57	3
E9941070	GA941070	7.0	10	16	66	3
E9941080	GA941080	8.0	10	19	69	3
E9941090	GA941090	9.0	10	19	69	3
E9941100	GA941100	10.0	10	22	72	4
E9941120	GA941120	12.0	12	26	83	4
E9941140	GA941140	14.0	12	26	83	4
E9941160	GA941160	16.0	16	32	92	4
E9941180	GA941180	18.0	16	32	92	4
E9941200	GA941200	20.0	20	38	104	4
E9941220	GA941220	22.0	20	38	104	5
E9941250	GA941250	25.0	25	45	121	5

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

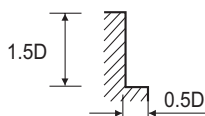
Tolerance range in $\mu\text{m}$ / Toleranzwerte in $\mu\text{m}$						
Nominal-Diameter in mm / Nennmaßbereich in mm						
	from 1 to 3 von 1 bis 3	over 3 to 6 über 3 bis 6	over 6 to 10 über 6 bis 10	over 10 to 18 über 10 bis 18	over 18 to 30 über 18 bis 30	over 30 to 50 über 30 bis 50
js12	$\pm 50$	$\pm 60$	$\pm 75$	$\pm 90$	$\pm 105$	$\pm 125$
h6	$\begin{matrix} 0 \\ -6 \end{matrix}$	$\begin{matrix} 0 \\ -8 \end{matrix}$	$\begin{matrix} 0 \\ -9 \end{matrix}$	$\begin{matrix} 0 \\ -11 \end{matrix}$	$\begin{matrix} 0 \\ -13 \end{matrix}$	$\begin{matrix} 0 \\ -16 \end{matrix}$

◎ : Excellent    ○ : Good

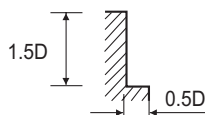
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
◎	◎	○				○		◎				

**PREMIUM HSS-PM, MULTI FLUTE ROUGHING - SIDE CUTTING  
PREMIUM HSS-PM, MULTI SCHNEIDEN SCHRUPFRÄSER - SEITENFRÄSEN****GA941, GAA35, GAA33, GAA34, GAA26 SERIES**

MATERIAL	STRUCTURAL STEELS CARBON STEELS		STRUCTURAL STEELS CARBON STEELS CAST IRONS		CARBON STEELS ALLOY STEELS TOOL STEELS		PREHARDENED STEELS ALLOY STEELS TOOL STEELS	
HARDNESS			~ HRc20		HRc20 ~ HRc30		HRc30 ~ HRc40	
STRENGTH	~ 500N/mm <sup>2</sup>		500 ~ 800N/mm <sup>2</sup>		800 ~ 1000N/mm <sup>2</sup>		1000 ~ 1300N/mm <sup>2</sup>	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	2800	230	2200	180	1600	115	1300	105
8.0	2400	290	1900	230	1400	160	1050	125
10.0	1900	415	1500	315	1050	195	890	160
12.0	1600	415	1200	330	900	230	740	180
14.0	1400	415	1050	330	760	230	630	180
16.0	1200	415	950	330	660	230	550	180
18.0	1050	415	890	330	610	230	490	180
20.0	960	425	760	330	530	230	440	180
22.0	890	425	650	330	470	230	400	180
25.0	790	415	600	315	420	220	360	180

RPM = rev./min.  
FEED = mm/min.**PREMIUM HSS-PM, MULTI FLUTE ROUGHING - SIDE CUTTING  
PREMIUM HSS-PM, MULTI SCHNEIDEN SCHRUPFRÄSER - SEITENFRÄSEN****E9941, E9A35, E9A33, E9A34, E9A26 SERIES**

MATERIAL	STRUCTURAL STEELS CARBON STEELS		STRUCTURAL STEELS CARBON STEELS CAST IRONS		CARBON STEELS ALLOY STEELS TOOL STEELS		PREHARDENED STEELS ALLOY STEELS TOOL STEELS	
HARDNESS			~ HRc20		HRc20 ~ HRc30		HRc30 ~ HRc40	
STRENGTH	~ 500N/mm <sup>2</sup>		500 ~ 800N/mm <sup>2</sup>		800 ~ 1000N/mm <sup>2</sup>		1000 ~ 1300N/mm <sup>2</sup>	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	1900	140	1500	110	1050	70	900	65
8.0	1600	180	1300	140	900	100	740	80
10.0	1300	260	1000	195	710	125	600	100
12.0	1100	260	820	205	600	140	500	110
14.0	930	260	710	205	510	140	430	110
16.0	820	260	640	205	450	140	370	110
18.0	710	260	610	205	410	140	330	110
20.0	660	265	510	205	360	140	300	110
22.0	610	265	440	205	320	140	270	110
25.0	540	260	400	195	280	135	240	110

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