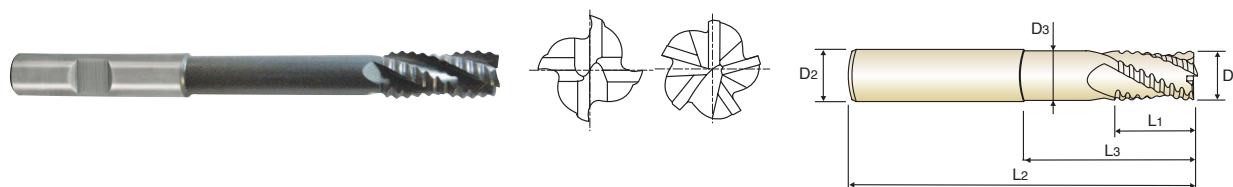


PREMIUM HSS-PM, MULTI FLUTE ROUGHING WITH NECK - COARSE

PREMIUM HSS-PM, MULTI SCHNEIDEN SCHRUPFRÄSER MIT ABGESETZTEM SCHAFTTETL - GROB

- High chip removal and minimizing breakages of cutting edges.
- Design to machine carbon steels, alloyed steels, stainless steels.
- YG-1's new developed TANK-POWER Coating suitable for high speed cutting.

- Schnelle Spanabfuhr und Minimierung von Schneidkantenausbrüchen
- Geeignet zum Fräsen von Stahl, legiertem Stahl und rostfreier Stahl.
- Neuentwickelte Beschichtung für Hochgeschwindigkeitsfräsen.



P.1164, 1165

Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter	No. of Flute
UNCOATED	TANK-POWER COATED	D1(js12)	D2(h6)	L1	L3	L2	D3	
E9E43100	GAE43100	10.0	10	22	69	110	8.5	4
E9E43120	GAE43120	12.0	12	26	78	125	10.5	4
E9E43160	GAE43160	16.0	16	32	87	138	14	4
E9E43200	GAE43200	20.0	20	38	108	160	18	4
E9E43250	GAE43250	25.0	25	45	155	216	23	5

Tolerances according to DIN 7160 & 7161

Toleranzen nach DIN 7160 & 7161

Tolerance range in μm / Toleranzwerte in μm						
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	± 50	± 60	± 75	± 90	± 105	± 125
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13	0 - 16

◎ : 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									
◎	◎	○				○		◎		◎				



TANK-POWER END MILLS

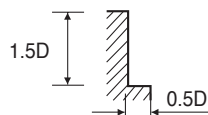
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN

PREMIUM HSS-PM, MULTI FLUTE ROUGHING WITH NECK - SIDE CUTTING

E9E43 SERIES

MATERIAL	STRUCTURAL STEELS CARBON STEELS				STRUCTURAL STEELS CARBON STEELS CAST IRONS				CARBON STEELS ALLOY STEELS TOOL STEELS			
HARDNESS					~ HRC20				HRC20 ~ HRC30			
STRENGTH	~ 500N/mm ²				500 ~ 800N/mm ²				800 ~ 1000N/mm ²			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	1300	220	41	0.042	1000	165	32	0.041	710	105	23	0.037
12.0	1100	220	41	0.050	820	175	32	0.053	600	120	23	0.050
16.0	820	220	41	0.067	640	175	32	0.068	450	120	23	0.067
20.0	660	225	41	0.085	510	175	32	0.086	360	120	23	0.083
25.0	540	220	41	0.081	400	165	32	0.083	280	115	23	0.082

MATERIAL	PREHARDENED STEELS ALLOY STEELS TOOL STEELS				STAINLESS STEELS			
HARDNESS	HRC30 ~ HRC40							
STRENGTH	1000 ~ 1300N/mm ²							
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	600	85	19	0.035	660	100	21	0.038
12.0	500	95	19	0.048	560	125	21	0.058
16.0	370	95	19	0.064	420	125	21	0.074
20.0	300	95	19	0.079	330	125	21	0.095
25.0	240	95	19	0.079	270	120	21	0.089

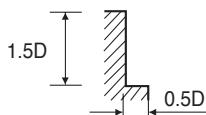


RPM = rev./min.
FEED = mm/min.
Vc = m/min.
fz = mm/t

PREMIUM HSS-PM, MULTI FLUTE ROUGHING WITH NECK - SIDE CUTTING
G9E43 SERIES

MATERIAL	STRUCTURAL STEELS CARBON STEELS				STRUCTURAL STEELS CARBON STEELS CAST IRONS				CARBON STEELS ALLOY STEELS TOOL STEELS			
HARDNESS					~ HRC20				HRC20 ~ HRC30			
STRENGTH	~ 500N/mm ²				500 ~ 800N/mm ²				800 ~ 1000N/mm ²			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	1900	355	60	0.047	1500	270	47	0.045	1050	165	33	0.039
12.0	1600	355	60	0.055	1200	280	47	0.058	900	195	33	0.054
16.0	1200	355	60	0.074	950	280	47	0.074	660	195	33	0.074
20.0	960	360	60	0.094	760	280	47	0.092	530	195	33	0.092
25.0	790	355	60	0.090	600	270	47	0.090	420	185	33	0.088

MATERIAL	PREHARDENED STEELS ALLOY STEELS TOOL STEELS				STAINLESS STEELS			
HARDNESS	HRC30 ~ HRC40							
STRENGTH	1000 ~ 1300N/mm ²							
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
10.0	890	135	28	0.038	950	145	30	0.038
12.0	740	155	28	0.052	800	175	30	0.055
16.0	550	155	28	0.070	600	175	30	0.073
20.0	440	155	28	0.088	480	175	30	0.091
25.0	360	155	28	0.086	390	170	30	0.087



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