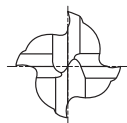


PLAIN SHANK
GLATTER ZYLINDERSCHAFT

FLAT SHANK
SEITLICHE MITNAHMEFLÄCHEN

CARBIDE, 4 FLUTE LONG LENGTH
VOLLHARTMETALL, 4 SCHNEIDEN LANG

- ▶ Zaprojektowany do obróbki stali narzędziowych, stali stopowych, stali na formy i innych materiałów wysoko utwardzonych
- ▶ 4 ostrza pozwalają na lepszą obróbkę wykańczającą części
- ▶ Zwiększa wydajność produkcji



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
PLAIN	FLAT				
EM817020	—	2.0	4	8	40
EM817030	EM827030	3.0	6	12	50
EM817040	EM827040	4.0	6	15	50
EM817050	EM827050	5.0	6	20	60
EM817060	EM827060	6.0	6	20	60
EM817080	EM827080	8.0	8	25	70
EM817100	EM827100	10.0	10	30	90
EM817120	EM827120	12.0	12	30	90
EM817140	EM827140	14.0	16	40	110
EM817160	EM827160	16.0	16	50	110
EM817180	EM827180	18.0	20	50	110
EM817200	EM827200	20.0	20	55	110
EM817250	EM827250	25.0	25	75	140

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 LONG - SIDE CUTTING
VOLLHARTMETALL, 4 SCHNEIDEN LANG - SEITENFRÄSEN
HSS

 CBN
 END MILLS

 i-Xmill
 END MILLS

 i-HS mill
 END MILLS

 X5070
 END MILLS

 4G MILL
 END MILLS

 X-SPEED
 ROUGHER
 END MILLS

**X-POWER
 END MILLS**

 JET-POWER
 END MILLS

 TN MILL
 END MILLS

 V7 Mill
 END MILLS

 ALU-POWER
 END MILLS

 CRX S
 END MILLS

 D-POWER
 GRAPHITE
 END MILLS

 D-POWER
 CFRP
 END MILLS

ROUTERS

 K-2 CARBIDE
 END MILLS

 GENERAL
 CARBIDE
 END MILLS

 TANK-POWER
 END MILLS

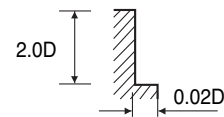
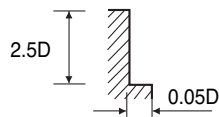
 GENERAL
 HSS
 END MILLS

 MILLING
 CUTTERS

 TECHNICAL
 DATA

EM817, EM827 SERIES

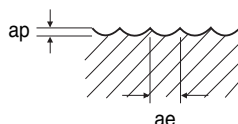
MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON				ALLOY STEELS HEAT RESISTANT STEELS				HARDENED STEELS				HARDENED STEELS			
HARDNESS	~ HRc30				HRc30 ~ HRc45				HRc45 ~ HRc55				HRc55 ~ HRc65			
STRENGTH	~ 1000N/mm ²				1000 ~ 1500N/mm ²				1500 ~ 2000N/mm ²				2000N/mm ² ~			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
2.0	8820	200	55	0.006	5040	80	30	0.004	3150	45	20	0.004				
3.0	6170	230	60	0.009	3570	100	35	0.007	2200	55	20	0.006	1890	30	20	0.004
4.0	5000	280	65	0.014	2840	115	35	0.010	1790	60	20	0.008	1470	35	20	0.006
5.0	4270	360	65	0.021	2420	140	40	0.014	1580	70	25	0.011	1260	40	20	0.008
6.0	3680	430	70	0.029	2100	180	40	0.021	1370	90	25	0.016	1160	50	20	0.011
8.0	2800	460	70	0.041	1580	180	40	0.028	1050	90	25	0.021	840	50	20	0.015
10.0	2350	460	75	0.049	1370	180	45	0.033	840	90	25	0.027	670	50	20	0.019
12.0	1920	360	70	0.047	1160	160	45	0.034	700	70	25	0.025	560	40	20	0.018
16.0	1620	320	80	0.049	890	125	45	0.035	560	60	30	0.027	440	35	20	0.020
20.0	1180	230	75	0.049	680	90	45	0.033	420	45	25	0.027	340	25	20	0.018


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

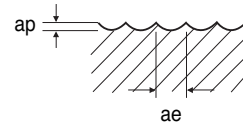
CARBIDE, 2 FLUTE MINIATURE BALL NOSE
VOLLHARTMETALL, 2 SCHNEIDEN MINI STIRNRADIUS
EM865 SERIES

MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON				HARDENED STEELS			
HARDNESS	HRc30 ~ HRc45				HRc45 ~ HRc55			
STRENGTH	1000 ~ 1500N/mm ²				1500 ~ 2000N/mm ²			
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
RO.3 × 0.6	30000	510	55	0.009	30000	360	55	0.006
RO.4 × 0.8	27000	560	70	0.010	27000	330	70	0.006
RO.5 × 1.0	25000	560	80	0.011	25000	340	80	0.007
RO.6 × 1.2	24000	570	90	0.012	24000	350	90	0.007
RO.75 × 1.5	23000	600	110	0.013	23000	370	110	0.008
R1.0 × 2.0	19000	570	120	0.015	19000	320	120	0.008
R1.5 × 3.0	14000	480	130	0.017	14000	280	130	0.010

$D < 1$
 $ap = 0.05 \times D$
 $ae = 0.15 \times D$



$D < 1$
 $ap = 0.05 \times D$
 $ae = 0.1 \times D$


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