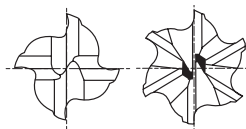
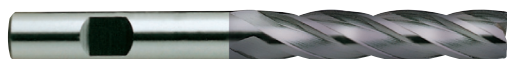


4&6 FLUTE LONG END MILLS



P.21~22

Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
Non Coating	TiAIN					
ESH597020	EHC597020	2.0	6	10	54	4
ESH597030	EHC597030	3.0	6	12	56	4
ESH597040	EHC597040	4.0	6	19	63	4
ESH597050	EHC597050	5.0	6	24	68	4
ESH597060	EHC597060	6.0	6	24	68	4
ESH597070	EHC597070	7.0	10	30	80	4
ESH597080	EHC597080	8.0	10	38	88	4
ESH597090	EHC597090	9.0	10	38	88	4
ESH597100	EHC597100	10.0	10	45	95	4
ESH597110	EHC597110	11.0	12	45	102	4
ESH597120	EHC597120	12.0	12	53	110	4
ESH597130	EHC597130	13.0	12	53	110	4
ESH597140	EHC597140	14.0	12	53	110	4
ESH597150	EHC597150	15.0	12	53	110	4
ESH597160	EHC597160	16.0	16	63	123	4
ESH597170	EHC597170	17.0	16	63	123	4
ESH597180	EHC597180	18.0	16	63	123	4
ESH597190	EHC597190	19.0	16	63	123	4
ESH597200	EHC597200	20.0	20	75	141	4
ESH597220	EHC597220	22.0	20	75	141	4
ESH597240	EHC597240	24.0	25	90	166	4
ESH597250	EHC597250	25.0	25	90	166	4
ESH597260	EHC597260	26.0	25	90	166	4
ESH597280	EHC597280	28.0	25	90	166	4
ESH597300	EHC597300	30.0	25	90	166	4
ESH598220	EHC598220	22.0	20	75	141	6
ESH598240	EHC598240	24.0	25	90	166	6
ESH598250	EHC598250	25.0	25	90	166	6
ESH598260	EHC598260	26.0	25	90	166	6
ESH598280	EHC598280	28.0	25	90	166	6
ESH598300	EHC598300	30.0	25	90	166	6
ESH598320	EHC598320	32.0	32	106	186	6

Mill Dia. Tolerance(mm)		Shank Dia. Tolerance
up to $\varnothing 6$	0 ~ +0.04	
over $\varnothing 6$	0 ~ +0.05	

h6

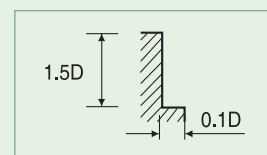
4&6 FLUTE TiAlN COATED - SIDE CUTTING

EHC595, EHC597 Series

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS				CARBON STEELS ALLOY STEELS TOOL STEELS				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	V _c	f _z	RPM	FEED	V _c	f _z	RPM	FEED	V _c	f _z
2.0	7850	110	50	0.004	6300	75	40	0.003	5600	65	35	0.003
3.0	4900	155		0.008	4500	110	40	0.006	3500	85	35	0.006
4.0	3900	195	50	0.013	3100	140	40	0.011	2500	90	30	0.009
5.0	3100	250	50	0.020	2500	175	40	0.018	2250	125	35	0.014
6.0	2500	250	45	0.025	2250	205	40	0.023	1700	125	30	0.018
8.0	1950	280	50	0.036	1550	225	40	0.036	1250	145	30	0.029
10.0	1550	280	50	0.045	1250	225	40	0.045	1100	170	35	0.039
12.0	1250	310	45	0.062	1100	250	40	0.057	900	170	35	0.047
14.0	1100	310	50	0.070	1000	225	45	0.056	800	170	35	0.053
16.0	1000	310	50	0.078	800	225	40	0.070	650	145	35	0.056
18.0	900	280	50	0.078	700	225	40	0.080	550	145	30	0.066
20.0	800	280	50	0.088	650	225	40	0.087	550	145	35	0.066
22 (4F)	700	280	50	0.100	650	225	45	0.087	500	145	35	0.073
25 (4F)	650	250	50	0.096	550	205	45	0.093	450	125	35	0.069
28 (4F)	550	225	50	0.102	500	175	45	0.088	400	110	35	0.069
30 (4F)	500	195	45	0.098	450	155	40	0.086	350	105	35	0.075
22 (6F)	700	280	50	0.067	650	225	45	0.058	500	145	35	0.048
25 (6F)	650	250	50	0.064	550	205	45	0.062	450	125	35	0.046
28 (6F)	550	225	50	0.068	500	175	45	0.058	400	110	35	0.046
30 (6F)	500	195	45	0.065	450	155	40	0.057	350	105	35	0.050
32.0	500	195	50	0.065	400	140	40	0.058	300	90	30	0.050

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS				ALUMINUM ALUMINUM ALLOYS			
HARDNESS	HRc30 ~ HRc40							
STRENGTH	1000 ~ 1300N/mm ²							
DIAMETER	RPM	FEED	V _c	f _z	RPM	FEED	V _c	f _z
2.0	3100	30	20	0.002	16800	335	105	0.005
3.0	2250	40	20	0.004	15400	530	145	0.009
4.0	1550	65	20	0.010	11200	615	140	0.014
5.0	1250	70	20	0.014	8800	660	140	0.019
6.0	1100	85	20	0.019	7850	660	150	0.021
8.0	800	90	20	0.028	5600	810	140	0.036
10.0	650	90	20	0.035	4350	840	135	0.048
12.0	550	105	20	0.048	3500	800	130	0.057
14.0	500	105	20	0.053	3100	740	135	0.060
16.0	400	90	20	0.056	2800	740	140	0.066
18.0	350	90	20	0.064	2500	740	140	0.074
20.0	300	90	20	0.075	2250	670	140	0.074
22 (4F)	300	90	20	0.075	1950	630	135	0.081
25 (4F)	250	70	20	0.070	1700	590	135	0.087
28 (4F)	200	65	20	0.081	1550	560	135	0.090
30 (4F)	200	65	20	0.081	1550	560	145	0.090
22 (6F)	300	90	20	0.050	1950	630	135	0.054
25 (6F)	250	70	20	0.047	1700	590	135	0.058
28 (6F)	200	65	20	0.054	1550	560	135	0.060
30 (6F)	200	65	20	0.054	1550	560	145	0.060
32.0	200	65	20	0.054	1400	505	140	0.060

RPM = rev./min.
Feed = mm/min.
V_c = m/min.
f_z = mm/tooth



*The FEED, in long & extra long types, should be reduced by around 50%