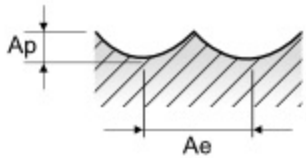
HSS END MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

E2535, E2492 SERIES

2 FLUTE BALL NOSE

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

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø) 3.0	4.0	6.0	8.0	10.0	12.0	16.0	20.0	25.0
P	1	Non-alloy steel	0.7D	0.3D	Vc	40	40	40	40	40	40	40	40	40
					fz	0.011	0.018	0.031	0.05	0.069	0.085	0.094	0.117	0.13
					RPM	4244	3183	2122	1592	1273	1061	796	637	509
					FEED	93	115	132	159	176	180	150	149	132
	2		0.7D	0.3D	Vc	30	30	30	30	30	30	30	30	30
					fz	0.01	0.017	0.026	0.044	0.06	0.066	0.083	0.085	0.088
					RPM	3183	2387	1592	1194	955	796	597	477	382
					FEED	64	81	83	105	115	105	99	81	67
	3-4		0.7D	0.3D	Vc	20	20	20	20	20	15	20	20	15
					fz	0.008	0.013	0.023	0.036	0.054	0.061	0.079	0.083	0.091
					RPM	2122	1592	1061	796	637	398	398	318	191
					FEED	34	41	49	57	69	49	63	53	35
	5		0.7D	0.3D	Vc	15	15	15	15	15	10	15	15	15
					fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094
					RPM	1592	1194	796	597	477	265	298	239	191
					FEED	22	31	29	36	42	29	42	42	36
	6	Low alloy steel	0.7D	0.3D	Vc	30	30	30	30	30	30	30	30	30
					fz	0.01	0.017	0.026	0.044	0.06	0.066	0.083	0.085	0.088
					RPM	3183	2387	1592	1194	955	796	597	477	382
					FEED	64	81	83	105	115	105	99	81	67
	7		0.7D	0.3D	Vc	20	20	20	20	20	15	20	20	15
					fz	0.008	0.013	0.023	0.036	0.054	0.061	0.079	0.083	0.091
					RPM	2122	1592	1061	796	637	398	398	318	191
					FEED	34	41	49	57	69	49	63	53	35
	8-9		0.7D	0.3D	Vc	15	15	15	15	15	10	15	15	15
					fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094
					RPM	1592	1194	796	597	477	265	298	239	191
					FEED	22	31	29	36	42	29	42	42	36
	10	High alloyed steel, and tool steel	0.7D	0.3D	Vc	30	30	30	30	30	30	30	30	30
					fz	0.01	0.017	0.026	0.044	0.06	0.066	0.083	0.085	0.088
					RPM	3183	2387	1592	1194	955	796	597	477	382
					FEED	64	81	83	105	115	105	99	81	67
	11.1		0.7D	0.3D	Vc	15	15	15	15	15	10	15	15	15
					fz	0.007	0.013	0.018	0.03	0.044	0.055	0.07	0.088	0.094
					RPM	1592	1194	796	597	477	265	298	239	191
					FEED	22	31	29	36	42	29	42	42	36
N	21-22	Aluminum-wrought alloy	0.7D	0.3D	Vc	105	100	105	100	100	95	100	100	100
					fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.088	0.096
					RPM	11141	7958	5570	3979	3183	2520	1989	1592	1273
					FEED	223	255	279	350	357	343	298	280	244
	23-24	Aluminum-cast, alloyed	0.7D	0.3D	Vc	68	65	68	65	65	62	65	65	65
					fz	0.01	0.016	0.025	0.044	0.056	0.068	0.075	0.088	0.096
					RPM	7215	5173	3608	2586	2069	1645	1293	1035	828
					FEED	144	166	180	228	232	224	194	182	159

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