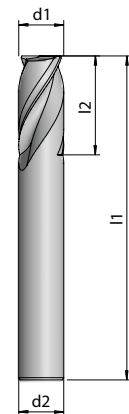
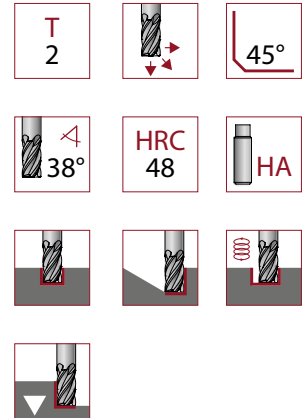


SHANK END MILLS

POWERLINE | S 1000

Short version				
Article no.	d1	d2	l1	l2
10000300	3	6	57	7
10000400	4	6	57	8
10000500	5	6	57	10
10000600	6	6	57	10
10000800	8	8	63	16
10001000	10	10	72	19
10001200	12	12	83	22
10001600	16	16	92	30
10001800	18	18	104	34
10002000	20	20	104	38

Medium version				
Article no.	d1	d2	l1	l2
10000301	3	6	80	7
10000401	4	6	80	8
10000501	5	6	80	10
10000601	6	6	100	10
10000801	8	8	100	16
10001001	10	10	100	19
10001201	12	12	100	22



Shoulder milling	$a_p \times a_e = 1d \times 0,3d$
Slot milling	$a_p \times a_e = 1d \times 1d$



Cutting data for short version		Shoulder	Slot	
Material	N/mm ²	v _c m/min		
P	Gen. structural/ case hard. steels 1.0037 1.0570 1.0503 1.7131	< 800	150	100
	Tool/ tempering steels 1.2367 1.2379 1.7225	< 1100	100	70
	Alloyed/ cold work steels 1.2312 1.2767 1.3505 1.7707	< 1400	75	50
M	Stainless steels 1.4301 1.4305 1.4034	< 750	60	–
N	Aluminum Si content 0,5–9% 3.1645 3.2163	–	350	300
	Aluminum Si content 10–15% 3.2523	–	300	260
	Copper/ brass/ bronze 2.0321 2.1030	–	230	150
	Medium hard/ soft plastics	–	200–300	180–250

d1	Shoulder	Slot
	fz mm	
3	0,025	0,010
4	0,035	0,020
5	0,040	0,025
6	0,050	0,030
8	0,060	0,035
10	0,070	0,040
12	0,100	0,045
16	0,120	0,055
18	0,130	0,070
20	0,150	0,090