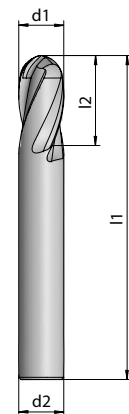
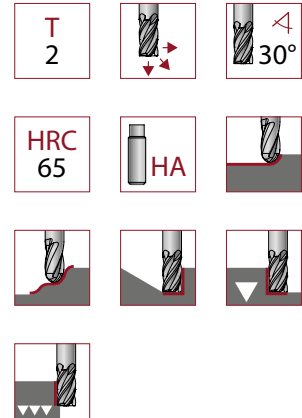


BALL END MILLS

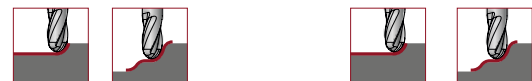
HPC | K 1150

Short version				
Article no.	d1	d2	l1	l2
11500301	3	4	50	5
11500401	4	4	50	6
11500501	5	5	57	8
11500601	6	6	57	9
11500801	8	8	63	12
11501001	10	10	72	15
11501201	12	12	83	18
11501601	16	16	92	24
11502001	20	20	104	30

Long version				
Article no.	d1	d2	l1	l2
11500300	3	4	78	5
11500400	4	4	78	6
11500500	5	5	78	8
11500600	6	6	98	9
11500800	8	8	98	12
11501000	10	10	98	15
11501200	12	12	118	18
11501600	16	16	152	24
11502000	20	20	152	30



Ball track milling	$a_p \times a_e = 0,3d \times 0,3d$
Copy milling	$a_p \times a_e = 0,65d \times 1d$



Cutting data for short version		Ball track	Copy	
Material	N/mm ²	v _c m/min		
P	Gen. structural/ case hard. steels 1.0037 1.0570 1.0503 1.7131	< 800	170	120
	Tool/ tempering steels 1.2367 1.2379 1.7225	< 1100	130	90
	Alloyed/ cold work steels 1.2312 1.2767 1.3505 1.7707	< 1400	90	80
K	Cast iron GG25 GG40 GGG40	< 450	160–230	100–160
	Spherical cast iron GGG50 GGG60 GGG70	< 650	100–150	80–130
H	Hardened steel HRC 45–50	–	250	200
	Hardened steel HRC 51–58	–	210	180
	Hardened steel HRC 59–65	–	190	130

d1	Ball track	Copy
	fz mm	
3	0,050	0,020
4	0,060	0,025
5	0,065	0,035
6	0,070	0,040
8	0,080	0,045
10	0,085	0,050
12	0,100	0,070
14	0,110	0,070
16	0,110	0,070
18	0,110	0,070
20	0,110	0,070