

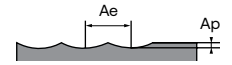
# Recommended Cutting Data



Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition

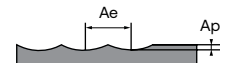


## BN 45 Ballnose Cutters, 4 Flutes - 485, B82



Roughing	K		P		M		S		H	
Working Material	Ductile Cast Iron		Prehardened steel		Stainless Steel		Nickel Alloy		Hardened steel	
Properties	-		35 ≤ HRC < 45		Low Machinability		-		45 ≤ HRC < 52	
Cutting depth, ap	0.10 × D		0.10 × D		0.08 × D		0.08 × D		0.10 × D	
Cutting Width, ae	0.30 × D		0.32 × D		0.24 × D		0.24 × D		0.30 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
3	160	0.016	185	0.021	70	0.013	40	0.015	140	0.017
4		0.022		0.029		0.018		0.021		0.024
5		0.032		0.037		0.023		0.027		0.031
6		0.041		0.046		0.028		0.033		0.038
8		0.057		0.063		0.038		0.044		0.056
10		0.073		0.081		0.048		0.056		0.073
12		0.091		0.102		0.058		0.068		0.091
14		0.101		0.115		0.066		0.078		0.103
16		0.112		0.129		0.076		0.088		0.113
18		0.121		0.142		0.084		0.099		0.121
20		0.129		0.153		0.093		0.108		0.130
22		0.136		0.163		0.101		0.117		0.140
25		0.145		0.174		0.113		0.135		0.149

## BN 45 Ballnose Cutters, 4 Flutes - 485, B82



Finishing	K		P		M		S		H	
Working Material	Ductile Cast Iron		Prehardened steel		Stainless Steel		Nickel Alloy		Hardened steel	
Properties	-		35 ≤ HRC < 45		Low Machinability		-		45 ≤ HRC < 52	
Cutting depth, ap	0.05 × D		0.05 × D		0.05 × D		0.05 × D		0.05 × D	
Cutting Width, ae	0.02 × D		0.02 × D		0.02 × D		0.02 × D		0.02 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
3	170	0.015	195	0.017	80	0.011	50	0.011	150	0.015
4		0.021		0.024		0.015		0.016		0.021
5		0.028		0.031		0.018		0.020		0.026
6		0.034		0.039		0.022		0.024		0.032
8		0.047		0.053		0.030		0.034		0.046
10		0.063		0.070		0.037		0.042		0.060
12		0.079		0.087		0.046		0.053		0.075
14		0.089		0.098		0.052		0.059		0.084
16		0.098		0.110		0.059		0.068		0.092
18		0.106		0.120		0.067		0.076		0.099
20		0.113		0.129		0.072		0.081		0.106
22		0.121		0.137		0.078		0.089		0.114
25		0.136		0.145		0.088		0.098		0.122