BACK TO RANGE INDEX

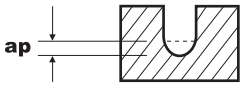
# 2 FLUTE BALL NOSE LONG NECK

G8A46 & G8A54 Series

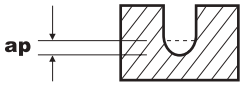
## CUTTING DATA

Slotting

| MATERIAL | | ALLOY STEEL & HEAT RESISTANT STEEL | | | | | HARDENED STEEL / STAINLESS STEEL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hardness | | HRc 30 ~ HRc 45 | | | | | <HRc 55 | | | | |
| Dia. | Rad. | RPM | Feed | Vc | Fz | ap | RPM | Feed | Vc | Fz | ap |
| 0.2 | 0.1 | 50000 | 300~350 | 31 | 0.012~0.014 | 0.006~0.016 | 50000 | 265~310 | 31 | 0.011~0.012 | 0.005~0.013 |
| 0.3 | 0.15 | 48000~50000 | 480~520 | 45~47 | 0.020~0.021 | 0.010~0.017 | 48000~50000 | 440~460 | 45~47 | 0.018~0.018 | 0.008~0.014 |
| 0.4 | 0.2 | 48000~50000 | 720~790 | 60~63 | 0.030~0.032 | 0.013~0.032 | 48000~50000 | 450~550 | 60~63 | 0.019~0.022 | 0.011~0.026 |
| 0.5 | 0.25 | 34100~49500 | 600~870 | 54~78 | 0.035~0.035 | 0.007~0.028 | 31900~35200 | 490~540 | 50~55 | 0.031~0.031 | 0.005~0.023 |
| 0.6 | 0.3 | 28600~40700 | 590~850 | 54~77 | 0.041~0.042 | 0.007~0.034 | 26400~29700 | 480~540 | 50~56 | 0.036~0.036 | 0.006~0.028 |
| 0.8 | 0.4 | 22000~30800 | 640~890 | 55~77 | 0.058~0.058 | 0.016~0.064 | 19800~22000 | 490~550 | 50~55 | 0.049~0.05 | 0.013~0.052 |
| 1 | 0.5 | 17600~24200 | 600~850 | 55~76 | 0.068~0.070 | 0.008~0.080 | 15400~17600 | 470~540 | 48~55 | 0.061~0.061 | 0.007~0.065 |
| 1.2 | 0.6 | 14300~18700 | 590~780 | 54~70 | 0.083~0.083 | 0.024~0.032 | 12000~14000 | 480~540 | 45~53 | 0.080~0.077 | 0.020~0.026 |
| 1.5 | 0.75 | 11000~14300 | 580~760 | 52~67 | 0.105~0.106 | 0.031~0.048 | 10000~11500 | 480~540 | 47~54 | 0.096~0.094 | 0.025~0.039 |
| 2 | 1 | 8500~11000 | 590~800 | 53~69 | 0.139~0.145 | 0.024~0.160 | 7900~8800 | 470~530 | 50~55 | 0.119~0.12 | 0.020~0.130 |
| 3 | 1.5 | 5700~8200 | 730~1000 | 54~77 | 0.256~0.244 | 0.064~0.240 | 5300~5800 | 590~650 | 50~55 | 0.223~0.224 | 0.052~0.195 |
| 4 | 2 | 4300~6200 | 680~990 | 54~78 | 0.316~0.319 | 0.080~0.320 | 3950~4400 | 550~620 | 50~55 | 0.299~0.282 | 0.065~0.026 |




| MATERIAL | | HIGH HARDENED STEEL | | | | | COPPER | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hardness | | < HRc 65 | | | | | - | | | | |
| Dia. | Rad. | RPM | Feed | Vc | Fz | ap | RPM | Feed | Vc | Fz | ap |
| 0.2 | 0.1 | 50000 | 225~265 | 31~31 | 0.009~0.011 | 0.005~0.012 | 50000 | 455~530 | 31~31 | 0.018~0.021 | 0.010~0.022 |
| 0.3 | 0.15 | 46000~50000 | 390~420 | 43~47 | 0.017~0.017 | 0.007~0.013 | 48000~50000 | 690~790 | 45~47 | 0.029~0.032 | 0.002~0.023 |
| 0.4 | 0.2 | 46000~50000 | 400~460 | 58~63 | 0.017~0.018 | 0.010~0.024 | 48000~50000 | 1000~1150 | 60~63 | 0.042~0.046 | 0.019~0.048 |
| 0.5 | 0.25 | 31900~35200 | 440~480 | 50~55 | 0.028~0.027 | 0.005~0.021 | 49000~50000 | 1100~1400 | 77~79 | 0.045~0.056 | 0.010~0.042 |
| 0.6 | 0.3 | 26400~29700 | 400~480 | 50~56 | 0.030~0.032 | 0.006~0.025 | 42000~50000 | 1100~1700 | 79~94 | 0.052~0.068 | 0.011~0.050 |
| 0.8 | 0.4 | 19800~22000 | 440~500 | 50~55 | 0.044~0.045 | 0.012~0.048 | 31000~50000 | 1100~2250 | 78~126 | 0.071~0.090 | 0.024~0.096 |
| 1 | 0.5 | 15400~17600 | 440~500 | 48~55 | 0.057~0.057 | 0.006~0.060 | 24000~49500 | 1100~2200 | 75~156 | 0.092~0.089 | 0.012~0.120 |
| 1.2 | 0.6 | 12000~14000 | 420~480 | 45~53 | 0.070~0.069 | 0.018~0.024 | 28500~38500 | 1480~1950 | 107~145 | 0.104~0.101 | 0.036~0.048 |
| 1.5 | 0.75 | 10000~11500 | 420~480 | 47~54 | 0.084~0.083 | 0.023~0.036 | 17000~28500 | 1100~1950 | 80~134 | 0.129~0.137 | 0.046~0.072 |
| 2 | 1 | 7900~8800 | 440~480 | 50~55 | 0.111~0.109 | 0.018~0.120 | 12600~24000 | 1100~2150 | 79~151 | 0.175~0.179 | 0.036~0.240 |
| 3 | 1.5 | 5300~5800 | 550~620 | 50~55 | 0.208~0.214 | 0.048~0.120 | 11900~17000 | 1850~2700 | 112~160 | 0.311~0.318 | 0.096~0.360 |
| 4 | 2 | 3850~4400 | 530~570 | 48~55 | 0.275~0.259 | 0.060~0.240 | 6600~12500 | 1260~2500 | 83~157 | 0.382~0.400 | 0.120~0.480 |




**RPM:** revolutions per minute **Feed:** mm per minute **Vc:** surface speed (metres per minute) **Fz:** feed per tooth