

## Solid Carbide End Mill Program - Ball Nose continued



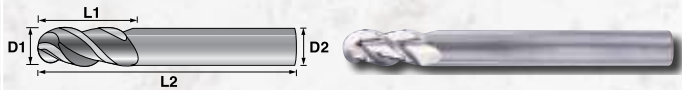
### BI2 - 2 Flute Long Series Endmill, Ball Nose

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.0006	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
BI2-0125-LL	1/8"	0.063"	0.125	0.625	2.000
BI2-0187-LL	3/16"	0.094"	0.187	1.000	3.000
BI2-0250-LL	1/4"	0.125"	0.250	1.000	3.000
BI2-0312-LL	5/16"	0.156"	0.312	1.000	3.000
BI2-0375-LL	3/8"	0.188"	0.375	1.000	4.000
BI2-0437-LL	7/16"	0.219"	0.437	1.000	4.000
BI2-0500-LL	1/2"	0.250"	0.500	1.000	4.000
BI2-0625-LL	5/8"	0.313"	0.625	2.000	6.000
BI2-0750-LL	3/4"	0.375"	0.750	2.000	6.000
BI2-1000-LL	1"	0.500"	1.000	2.000	6.000



### BI4 - 4 Flute Endmill Long Series, Ballnose

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.0006	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
BI4-0125-LL	1/8"	0.063"	0.125	0.625	2.000
BI4-0187-LL	3/16"	0.094"	0.187	1.000	3.000
BI4-0250-LL	1/4"	0.125"	0.250	1.000	3.000
BI4-0312-LL	5/16"	0.156"	0.312	1.000	3.000
BI4-0375-LL	3/8"	0.188"	0.375	1.000	4.000
BI4-0437-LL	7/16"	0.219"	0.437	1.000	4.000
BI4-0500-LL	1/2"	0.250"	0.500	1.000	4.000
BI4-0625-LL	5/8"	0.313"	0.625	2.000	6.000
BI4-0750-LL	3/4"	0.375"	0.750	2.000	6.000
BI4-1000-LL	1"	0.500"	1.000	2.000	6.000



### AlumiSTAR BIA - 3 Flute Endmill, Ball Nose 45° - Aluminum

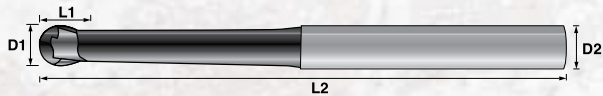
Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.0006	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
BIA-0125-	1/8"	0.063"	0.125	0.500	1.500
BIA-0187-	3/16"	0.094"	0.187	0.625	2.000
BIA-0250-	1/4"	0.125"	0.250	0.750	2.500
BIA-0312-	5/16"	0.156"	0.312	0.750	2.500
BIA-0375-	3/8"	0.188"	0.375	0.875	2.500
BIA-0437-	7/16"	0.219"	0.437	0.875	2.500
BIA-0500-	1/2"	0.250"	0.500	1.250	3.000
BIA-0625-	5/8"	0.313"	0.625	1.250	3.500
BIA-0750-	3/4"	0.375"	0.750	1.500	4.000
BIA-1000-	1"	0.500"	1.000	1.500	4.000

All products on these pages come in both TLN and HSN coatings.

Example: BI2-0125-LL-TLN

## Solid Carbide End Mill Program - Ball Nose continued

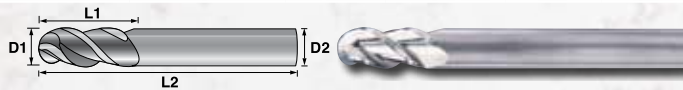
Extended Reach ball nose tools Series BMNL and extended reach square nose tools Series EMR are useful tools specifically designed for long reach milling of extrusion dies, deep cavities and cores, deep rib milling and similar applications. The reduced flute length and neck diameter assure constant cutting pressure and minimal tool deflection.



### BMNL - Ball, Extended Reach Tapered Nose\*

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.01	Corner Radius	Shank Diameter (D2)	No. of Flutes	Neck Diameter	Cutting Length (L1)	Nose Taper	Overall Length (L2)
BM-2.0-1.25NL	2	1	6	2	1,9 / 1,3	2	31,75 / (1,25")	75
BM-2.0-1.80NL	2	1	6	2	1,9 / 1,3	2	45,70 / (1,8")	75
BM-2.5-1.25NL	2,5	1,25	6	2	2,4 / 1,3	2,5	31,75 / (1,25")	75
BM-2.5-1.80NL	2,5	1,25	6	2	2,4 / 1,3	2,5	45,70 / (1,8")	75
BM-3.0-1.25NL	3	1,5	6	2	2,9 / 1,3	3	31,75 / (1,25")	75
BM-3.0-1.50NL	3	1,5	6	2	2,9 / 1,3	3	38,1 / (1,5")	75
BM-3.0-1.80NL	3	1,5	6	2	2,9 / 1,3	3	45,70 / (1,8")	75
BM-3.0-50NL	3	1,5	6	2	2,9 / 1,3	3	50 / (1,95")	75
BM-4.0-1.25NL	4	2	6	2	3,9 / 1,3	4	31,75 / (1,25")	75
BM-4.0-1.80NL	4	2	6	2	3,9 / 1,3	4	45,70 / (1,8")	75
BM-4.0-50NL	4	2	6	2	3,9 / 1,3	4	50 / (1,95")	75
BM-5.0-1.25NL	5	2,5	6	2	4,9 / 1,3	5	31,75 / (1,25")	75
BM-5.0-1.80NL	5	2,5	6	2	4,9 / 1,3	5	45,70 / (1,8")	75
BM-6.0-1.25NL	6	3	6	2	5,9 / -	6	31,75 / (1,25")	75
BM-6.0-1.50NL	6	3	6	2	5,9 / -	6	38,1 / (1,5")	75
BM-6.0-1.80NL	6	3	6	2	5,9 / -	6	45,70 / (1,8")	75
BM-8.0-1.25NL	8	4	8	2	7,9 / -	8	31,75 / (1,25")	75

\* 1.3° Neck Taper Per Side



### AlumiSTAR BMA - 3 Flute Endmill, Ballnose 45° - Aluminum

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
BMA-03-	3	1,5	3,000	12	38
BMA-04-	4	2	4,000	14	50
BMA-06-	6	3	6,000	19	63
BMA-08-	8	4	8,000	22	63
BMA-10-	10	5	10,000	25	63
BMA-12-	12	6	12,000	25	76
BMA-16-	16	8	16,000	38	92
BMA-20-	20	10	20,000	38	101

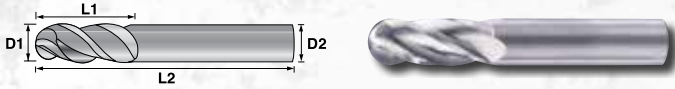


### BM2 - 2 Flute Long Series Endmill, Ballnose

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
BM2-03-LL-	3	1,5	3	16	50
BM2-04-LL-	4	2	4	20	76
BM2-06-LL-	6	3	6	25	76
BM2-08-LL-	8	4	8	25	76
BM2-10-LL-	10	5	10	25	101
BM2-12-LL-	12	6	12	25	101
BM2-16-LL-	16	8	16	50	152
BM2-20-LL-	20	10	20	50	152

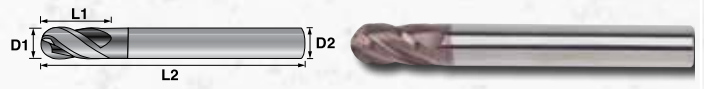
All products on these pages come in both TLN and HSN coatings.

## Solid Carbide End Mill Program - Ball Nose continued



### BM4 - 4 Flute Endmill Long Series, Ballnose

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
BM4-03-LL-	3	1,5	3	16	50
BM4-04-LL-	4	2	4	20	76
BM4-06-LL-	6	3	6	25	76
BM4-08-LL-	8	4	8	25	76
BM4-10-LL-	10	5	10	25	101
BM4-12-LL-	12	6	12	25	101
BM4-16-LL-	16	8	16	50	152
BM4-20-LL-	20	10	20	50	152



### BM4T - Ballnose, Special Tip Design for HSM

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.0004	Shank Diameter (D2)	Cutting Length (L1)	Overall Length (L2)
BM4T-3.0	3	6	6	75
BM4T-4.0	4	6	8	75
BM4T-6.0	6	6	12	75
BM4T-8.0	8	8	16	90
BM4T-10.0	10	10	20	100
BM4T-12.0	12	12	24	100



### BM220 - 220° 2 Flute Endmill, Ballnose

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
BM220-03-	3	1,5	3	2,25	38
BM220-04-	4	2	4	3,00	50
BM220-06-	6	3	6	4,50	63
BM220-08-	8	4	8	6,00	63
BM220-10-	10	5	10	7,50	63
BM220-12-	12	6	12	9,00	76

All products on these pages come in both TLN and HSN coatings.